

LOUISIANA DEPARTMENT OF WILDLIFE & FISHERIES



**OFFICE OF FISHERIES
INLAND FISHERIES SECTION**

PART VI –C (ARCHIVES)

WATERBODY MANAGEMENT PLAN SERIES

LAKE BISTINEAU

**AQUATIC VEGETATION TYPE MAPS
AND NARRATIVES - 2017**

APPENDIX I
Act No. 43 1930

ACT NO. 43.

House Bill No. 535.

By, Messrs. Wimberly,
Hughes and Bacon.

AN ACT

To establish the Lake Bistineau State Game and Fish Preserve out of Dorchest Bayou and Lake Bistineau in the Parishes of Bienville, Bossier, and Webster; to provide for the erection and maintenance of same under the control of the Department of Conservation; to provide for a Commission to administer and govern the same; to provide for a domicile therefor; to provide for the purchase or expropriation of all property necessary therefor; to provide for the sale or donation of state, school, levee board, or other public lands to said preserve, located within its boundaries and necessary to its maintenance and erection; to provide for the appropriation of money by the Parishes of Bienville, Bossier, and Webster for the benefit of said game and fish preserve; to provide for the voting of special taxes and issuing bonds for the purpose of erecting and maintaining said fish preserve by the Parishes of Bienville, Bossier, and Webster; to provide the issuance of certificates of indebtedness, secured by the revenues of the Commission; to provide for the erection and maintenance of dams, levees, dykes, canals, and drains; defining the power and authority of the Commission hereby created; providing for the expropriation of surface rights of privately owned property; providing that the mineral rights now held by private individuals may be retained; providing that the right of the State to lease lands within said

game and fish preserve for mineral purposes shall not be abridged; providing for the employment of special officers to police said game and fish preserve; giving the governing body of said fish preserve the right to charge a fee for the privilege of fishing or hunting on said preserve; providing for the erection and maintenance of fish hatcheries in or near said preserve; providing for closed seasons for hunting or fishing thereon; providing that rules and regulations made by the Game & Fish Commission shall be promulgated as ordinances by the Police Juries of the Parishes of Bienville, Bossier, and Webster, and that the violation of any of said rules and regulations thus promulgated shall be a misdemeanor and punishable by fine or imprisonment, or both; providing that said Game and Fish Commission shall have control of all of Dorcheat Bayou and over tributary streams for three (3) miles from the boundaries of said game and fish preserve; providing for the expropriation of money out of funds of the Department of Conservation to assist in the erection and maintenance of said game and fish preserve.

Section 1: Be it enacted by the Legislature of Louisiana, That the Lake Bistineau State Game & Fish Preserve is hereby created out of Dorcheat Bayou and Lake Bistineau situated in the Parishes of Bienville, Bossier, and Webster, South of Dixie-Overland Highway between Shreveport and Minden in Webster Parish, and extending South in Township Fifteen (15) and into Bossier and Bienville Parishes, and the territory comprising the preserve shall be all that land along Dorcheat Bayou and Lake Bistineau below mean high water mark as shown by the meandering lines as now of record, until new lines and boundary be defined by surveys made under supervision of the Department of Conservation, and the Commission in charge of this Lake Bistineau State Game & Fish Preserve shall have authority and control extending one-half (1/2) mile beyond such boundary lines now established, or that may be established.

Providing for establishment of Lake Bistineau State Game and Fish Preserve created.

Section 2: That there is hereby created the Lake Bistineau State Game & Fish Commission to be composed of three members, one to be elected by each of the Police Juries of the Parishes of Bienville, Bossier, and Webster, and to serve each for the term of four (4) years, after the first term, and the first term of the member from Bienville shall expire July 1st, 1934, and the first term of the member from Bossier shall expire July 1st, 1935, and the first term of the member from Webster shall expire July 1st, 1936.

Lake Bistineau State Game and Fish Commission created.

Section 3: That said Game & Fish Commission, under the control of the Department of Conservation, shall have

Powers and authority.

the right to administer said Game & Fish Preserve and to make rules and regulations for the control thereof. That said Commission shall have the power and authority, under the control of and supervision of the Department of Conservation, to regulate and control the taking of Game or Fish from the preserve, to establish closed seasons, to fix game and fish limits, to employ wardens, to build roads, to provide camps and boats, to fix fees for hunting or fishing in said preserve, in addition to fees for state licenses, to make rules and regulations and enforce the same, to buy, lease, or sell property necessary to the establishment and maintenance, or improvement of said preserve, to lease or let the privilege of commercial fishing in said preserve, to employ all labor necessary, to establish fish hatcheries, and to do any and all things necessary to the propagation and conservation of game and fish in the preserve.

Authority of Commissioner of Dept. of Conservation to appoint members of Commission.

Section 4: The members of the said Commission shall be duly qualified electors within and for the parish from which they are elected, and the election of each of said Commission shall be approved by the Commissioner of the Department of Conservation, and in the event of his failure to approve the election of any member, the Police Jury of the particular parish shall elect some other qualified person, and if any one of the Police Juries neglects, for ninety (90) days, to elect their Commissioner, then the Commissioner of the Department of Conservation may appoint said Commissioner.

Domicile of Commission.

Section 5: That Minden, Webster Parish, shall be the domicile of the Game & Fish Commission herein created, and the said Commission shall meet and organize and elect its officers which shall consist of a Chairman, Vice-Chairman and Secretary and Treasurer, and said Commission shall have the right, power and authority to sue and be sued. It may purchase, lease or expropriate all property necessary to the erection and maintenance of said Game & Fish Preserve; expropriation proceedings instituted by said Commission shall be conducted under and according to the general laws now in force for the expropriation of property for public purposes.

Right to acquire lands.

Section 6: All school boards, levee boards and all parochial and municipal governing authorities shall have the right, power and authority to sell or donate to the said Game & Fish Commission any lands lying within or adjoining the boundaries of said Game & Fish Preserve, but said property thereafter shall become the property of the State of Louisiana for the use and benefit of the said Game & Fish Preserve. Said School boards, levee boards, parochial and municipal governing authorities may sell or donate the surface of said lands and retain, at the same time, the own-

ership of the minerals with the right to grant leases for the production of oil, gas or other minerals.

Section 7: The said Game & Fish Commission shall have the power and authority to expropriate any land, including minerals, belonging to private individuals necessary to the erection and maintenance of the said Game & Fish Preserve. It may, if advisable, expropriate only the surface of the property, leaving the ownership of any minerals in said private land owners, and leaving to said private land owners the right to grant leases for the production of oil, gas, or other minerals, from lands thus expropriated. Right to expropriate.

Section 8: That all lands belonging to the State of Louisiana necessary to the erection and maintenance of said Game & Fish Preserve are hereby granted to the said Game & Fish Commission for the purposes herein set out, but this grant shall in no wise abridge the right of the state to lease said lands for the production of oil, gas, or other minerals under the general laws, of the state as now provided.

Section 9: That the Police Juries of the Parishes of Bienville, Bossier, and Webster may appropriate money out of the general funds of said parishes for the purpose of erecting and maintaining said Game & Fish Preserve, and the people of said parishes may, after an election duly called for that purpose under the Constitution and Laws of the State of Louisiana, vote special taxes and issue bonds in order to raise money for the erection and maintenance of said Game & Fish Preserve, which is hereby declared to be a public purpose and benefit. Appropriations parishes.

Special election special taxes and issuance of bonds.

Section 10: The said Game & Fish Commission hereby created shall have the right, power, and authority to anticipate any revenues derived by it from any source, and to issue certificates of indebtedness pledging said revenues for the payment of same. Said certificates of indebtedness shall not run longer than five (5) years. Right to anticipate revenues and certificates of indebtedness

Section 11: That all rules and regulations made and established by the Commission herein created for the government, control and regulation of said Game & Fish Preserve, shall be approved by the Department of Conservation and shall be promulgated in the form of an ordinance of each of the Police Juries of the Parishes of Bienville, Bossier, and Webster, and published for thirty (30) days in a newspaper published in each of the said Parishes of Bienville, Bossier, and Webster, and the violation of any of the said rules and regulations made and published by said Police Juries shall be a misdemeanor and shall be punished by a fine, not exceeding five hundred (\$500.00) Dollars, or by imprisonment, not exceeding three (3) months, or both, at the discretion of the court. If the act of any one of the Police Juries is irregular and not legal, or if said Police Rules and regulations to be approved by Department of Conservation and published.

Penalty.

Jury fail to promulgate said rules and regulations, this shall not invalidate or impair the legality of the acts of the other Police Juries.

Dams, dikes, levees,
etc.

Section 12: That the said Game & Fish Commission shall have the power and authority to erect dams, dykes, and levees, dig all ditches, canals, or drains, and acquire all land by purchase, lease or donation necessary to the erection and maintenance of said Game & Fish Preserve.

Control of streams.

Section 13: That the said Game & Fish Commission shall have supervisory control over all streams tributary to said Game & Fish Preserve and shall have the power to make rules and regulations for the taking of fish from such tributary streams within three (3) miles of the boundaries of said Game & Fish Preserve, and over Dorcheat Bayou in the State of Louisiana.

Appropriation of
\$35,000.

Section 14: That there is hereby appropriated out of the conservation funds, the sum of Thirty-Five Thousand (\$35,000.00) Dollars not otherwise appropriated by the Department of Conservation to be used for the purpose of erecting and maintaining said Game & Fish Preserve. That this said amount shall be expended under the control and direction of the said Game & Fish Commission with the approval of the Commissioner of the Department of Conservation.

Constitutionality.

Section 15: That if any section of this Act be held unconstitutional, such decision shall not invalidate or affect other sections of the Act; and all laws and parts of laws in conflict with the provisions of this Act are hereby repealed.

Limitation.

Section 16: The Board of Liquidation of the State Debt is prohibited from borrowing any money for the purpose of carrying out the provisions of this Act, and this appropriation shall only be paid out of funds not otherwise appropriated.

Approved by the Governor: July 11, 1930.

A true copy:

JAMES J. BAILEY,
Secretary of State.

APPENDIX II

Act No. 64 1942

ACT No. 64.

House Bill No. 388.

By Mr. E. C. Parker.

AN ACT

To amend and re-enact Sections 3 and 11 of Act 43 of 1930, entitled: "An Act to establish the Lake Bistineau State Game and Fish Preserve out of Dorcheat Bayou and Lake Bistineau in the Parishes of Bienville, Bossier and Webster; to provide for the erection and maintenance of same under the control of the Department of Conservation; to provide for a Commission to administer and govern the same; to provide for a domicile therefor; to provide for the purchase or expropriation

of all property necessary therefor; to provide for the sale or donation of state, school, levee board, or other public lands to said preserve, located within its boundaries and necessary to its maintenance and erection; to provide for the appropriation of money by the Parishes of Bienville, Bossier, and Webster for the benefit of said game and fish preserve; to provide for the voting of special taxes and issuing bonds for the purpose of erecting and maintaining said fish preserve by the Parishes of Bienville, Bossier, and Webster; to provide the issuance of certificates of indebtedness secured by the revenues of the Commission; to provide for the erection and maintenance of dams, levees, dykes, canals and drains; defining the power and authority of the Commission hereby created; providing for the expropriation of surface rights of privately owned property; providing that the mineral rights now held by private individuals may be retained; providing that the right of the State to lease lands within said game and fish preserve for mineral purposes shall not be abridged; providing for the employment of special officers to police said game and fish preserve; giving the governing body of said fish preserve the right to charge a fee for the privilege of fishing or hunting on said preserve; providing for the erection and maintenance of fish hatcheries in or near said preserve; providing for closed seasons for hunting or fishing thereon; providing that rules and regulations made by the Game and Fish Commission shall be promulgated as ordinances by the Police Juries of the Parishes of Bienville, Bossier, and Webster, and that the violation of any of said rules and regulations thus promulgated shall be a misdemeanor and punishable by fine or imprisonment, or both; providing that said Game and Fish Commission shall have control of all of Dorcheat Bayou and over tributary streams for three (3) miles from the boundaries of said game and fish preserve; providing for the expropriation of money out of funds of the Department of Conservation to assist in the erection and maintenance of said game and fish preserve.

Section 1. Be it enacted by the Legislature of Louisiana, That Sections 3 and 11 of Act 43 of 1930 be and the same are hereby amended and re-enacted so as to read as follows:

Section 3. Said game and fish commission under the supervisory control of the Department of Conservation shall have the full right to administer, regulate, and control said game and fish preserve and a hunting and fishing area except as to the minerals and mineral rights Powers
authority.

as hereinafter set forth; and it shall make rules and regulations for the control thereof. That said Commission shall have the power and authority, under the supervisory control of the Department of Conservation, to regulate and control the taking of Game or Fish from the preserve, to establish closed seasons, to fix game and fish limits, to employ wardens, to build roads, to provide camps and boats, to fix fees for hunting or fishing in said preserve, in addition to fees for state licenses, to make rules and regulations and enforce the same, to buy, lease, or sell property necessary to the establishment and maintenance, or improvement of said preserve, and to lease or let the privilege of commercial fishing in said preserve, to employ all labor necessary, to establish fish hatcheries, and to do any and all things necessary to the propagation and conservation of game and fish in the preserve.

Right to apply for restraining orders.

The said commission is hereby granted the right to apply for and obtain restraining orders and writs of injunction, without payment of costs, against any and all parties deemed by them to be trespassing on said preserve in all cases of failure to comply with the rules and regulations adopted by it or to pay such license fees as fixed by it.

Rules and Regulations to be approved by Department of Conservation and to be published.

Penalty.

Section 2. That all rules and regulations made and established by the Commission herein created, for the government, control and regulation of said Game and Fish Preserve, shall be approved by the Department of Conservation and shall be promulgated in the form of an ordinance of each of the Police Juries of the Parishes of Bienville, Bossier, and Webster, and published for thirty (30) days in a newspaper published in each of the said Parishes of Bienville, Bossier, and Webster, and the violation of any of the said rules and regulations made and published by said Police Juries shall be a misdemeanor and shall be punished by a fine, not to exceed Five Hundred (\$500.00) Dollars, or by imprisonment, not to exceed (3) months, or both, at the discretion of the Court. If the act of any one of the Police Juries is irregular and not legal, or if said Police Jury fails to promulgate said rules and regulations, this shall not invalidate or impair the legality of the acts of the other Police Juries. Provided that in fixing such rules and regulations, the following regulations and laws shall govern the use of said preserve until such time as same are legally changed by the Commission:

Rules and Regulations governing preserve.

1. The disturbing of the waters of the game and fish preserve of Lake Bistineau, Dorcheat Bayou, and their tributaries by the beating of the waters with sticks, clubs,

water hose, inner tubes, by racing motors, in circles and courses, by the shooting of fire crackers, by the exploding of powder and dynamite or by any other means or instruments, is prohibited;

2. Commercial Fishing at night by any means is prohibited;

3. Commercial fishing is allowed during and between one hour after sun up and one hour before sun down, and all nets must be within the legal size; the mesh of the nets must come within the legal limits fixed by law; setting the nets within 300 feet of each other is prohibited. Algar must be destroyed and disposed of in a sanitary manner;

4. The catching and keeping game fish in nets is prohibited;

5. Operators of motor boats are required to reduce speed and exercise caution when meeting other boats or passing boats and shall pass on the right side;

6. The limit per person of the catch of fish shall be the same as and governed by the general state law on this subject.

7. It shall be unlawful for any person to have in his possession, either on or about his person, or in a boat, a pistol or rifle, while on the waters of said Lake Bistineau, Louisiana;

8. It shall be unlawful for any person to discharge a rifle or pistol on, over, under, across or partly across any of the waters of Lake Bistineau; provided that the above two sections shall not apply to having in possession or discharging a shotgun on Lake Bistineau;

9. Pollution of said Lake and its tributaries is hereby prohibited;

10. No duck blind may be built, maintained or located within 225 yards of another duck blind already erected on the open lake; any old duck blinds already erected in the wooded area must be constructed or maintained not less than 225 yards apart; no blinds may be built with larger than 8'x8' floor space, persons using duck blinds, excepting owners, are required to have written consent of the owner; hunters in boats are prohibited from shooting while the boat is in motion and in no case closer than 300 yards of duck blinds; the location of each duck blind must be designated at the time application for the use or building of such duck blind is made.

11. No person will be allowed to construct or maintain a duck blind unless such person has first paid an annual license fee of \$2.00 per annum to the commission prior to use of same for such year as prescribed by the Commission.

12. No building to be used as living quarters shall be allowed on the preserve and no obstructions of any kind shall be built thereon unless same are in keeping with the purposes of the preserve.

Penalty for violation.

The violation of any of the foregoing rules or regulations fixed under Paragraphs 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 and 12, shall constitute a separate misdemeanor and shall be punishable by fine not to exceed \$500.00, or by imprisonment not to exceed three months or both at the discretion of the court.

Jurisdiction.

The District Courts in or of Bossier, Bienville or Webster Parishes, bordering on said preserve, are hereby given jurisdiction for the prosecution, trial and conviction for any violations of the above named misdemeanors.

Approved by the Governor: July 7, 1942.

A true copy:

JAS. A. GREMILLION,
Secretary of State.

APPENDIX III

Act No. 152 1969

ACT No. 152

House Bill No. 218.

By: Messrs. Bigby, Stinson, Branton and Garrett and Senator Montgomery.

Act 152

AN ACT

To abolish the Lake Bisteneau State Fish and Game Commission and to transfer the functions, property, building, equipment and all of the appurtenances appertaining thereto of the said Lake Bisteneau State Fish and Game Commission and the Administration thereof to the Louisiana Wildlife and Fisheries Commission; to give the Louisiana Wildlife and Fisheries Commission all authority necessary to effectuate such transfer; and to otherwise provide in connection therewith.

Be it enacted by the Legislature of Louisiana:

Section 1. The Lake Bisteneau State Fish and Game Commission is hereby abolished.

Section 2. The functions, property, buildings, equipment, books, records, and all of the appurtenances appertaining thereto of the Lake Bisteneau State Fish and Game Commission and the administration thereof is hereby transferred to the Louisiana Wildlife and Fisheries Commission and the Louisiana Wildlife and Fisheries Commission is hereby granted all authority necessary to effectuate such transfer.

Section 3. Upon the said transfer of functions of the Lake Bisteneau State Fish and Game Commission to the Louisiana Wildlife and Fisheries Commission any pending or unfinished business thereof shall be taken over and completed by the said Louisiana Wildlife and Fisheries Commission, with the same power and authority as the Lake Bisteneau State Fish and Game Commission.

Section 4. The Louisiana Wildlife and Fisheries Commission shall be the successor in every way to the Lake Bisteneau State Fish and Game Commission, and every act done in the exercise of such functions by the Louisiana Wildlife and Fisheries Commission shall be deemed to have the same force and effect under any provisions of law in effect as if done by the Lake Bisteneau State Fish and Game Commission.

Whenever the Lake Bisteneau State Fish and Game Commission is referred to, or designated by any law or contract or other document, such reference or designation shall be deemed to apply to the Louisiana Wildlife and Fisheries Commission; provided that to the extent necessary to prevent the impairment of the contractual obligations of any agency heretofore existing, or of the state of Louisiana, the existence, organization, and functions of any such agency shall be excluded from the provisions of this Section, and like exclusion shall be made whenever necessary to prevent any violation of the provisions, terms, or conditions of any gift, donation, deed, will, trust, or other instrument or disposition by which property of any nature or description has been vested in

any agency affected by this Section, or the diversion from the purposes for which such property was donated, deeded, divided or bequested, or otherwise vested in any such agency; provided, further, that the provisions of this Section shall not be construed or applied in such a way as to prevent full compliance by the state or any agency thereof with the requirements of any Act of the Congress of the United States or any regulations made thereunder by any officer or agency of the Federal Government, by which Federal aid or other financial assistance from the United States has been made available to this state or any subdivision or agency thereof, anything contained in this Section to the contrary notwithstanding.

Section 5. All books, papers, records, money, choses in action, and other property heretofore used or possessed by any agency in the exercise of functions hereby transferred, shall be transferred to the Louisiana Wildlife and Fisheries Commission.

Section 6. If any provision or item of this Act or the application thereof is held invalid, such invalidity shall not affect other provisions, items or applications, of this Act which can be given effect without the invalid provisions, items or applications, and to this end the provisions of this Act are hereby declared severable.

Section 7. All laws or parts of laws in conflict herewith are hereby repealed.

Approved by the Governor : June 20, 1969.

A true copy :

WADE O. MARTIN, JR.
Secretary of State.

APPENDIX IV

Transfer to LDWF

RS 36:610

§610. Transfer of agencies to Department of Wildlife and Fisheries

D. The following agencies, as defined in R.S. 36:3, are hereby placed within the Department of Wildlife and Fisheries and shall exercise and perform their powers, duties, functions, and responsibilities as provided for agencies transferred in accordance with the provisions of Part II of Chapter 22 of this Title:

Lake Bistineau State Game and Fish Preserve (Acts 1930, No. 43, as amended)

RS 56:801

PART II. PARTICULAR STATE GAME AND FISH PRESERVES AND SANCTUARIES

§801. Particular game and fish preserves and commissions recognized and continued

The following preserves and commissions created by the enumerated special statutes are continued in full force and effect within the Department of Wildlife and Fisheries:

(1) Repealed by Acts 1981, No. 422, §2; Acts 1981, No. 490, §1; Acts 1981, No. 858, §5, eff. Jan. 1, 1982.

Lake Bistineau State Game and Fish Preserve (Acts 1930, No. 43; Acts 1942, No. 64; Acts 1969, No. 152; Acts 1977, No. 222, §1). Acts 1995, No. 1262, §1; Acts 1997, No. 21, §2.

¹SEE ACTS 1990, NO. 539, §1.

RS 56:802

§802. Responsibilities and duties

The department shall have the duty and responsibility for the management of resources, including water level control, aquatic weed control, and maintenance and repair of dams, control structures, and spillways within the territorial jurisdiction of each commission established in R.S. 56:801, provided that no local commission or authority is providing these services. The individual game and fish preserves and commissions or local governing authorities shall have the duty and responsibility for maintaining all support services within their territorial jurisdiction, including parks, picnic areas, and concessions.

Added by Acts 1982, No. 728, §1.

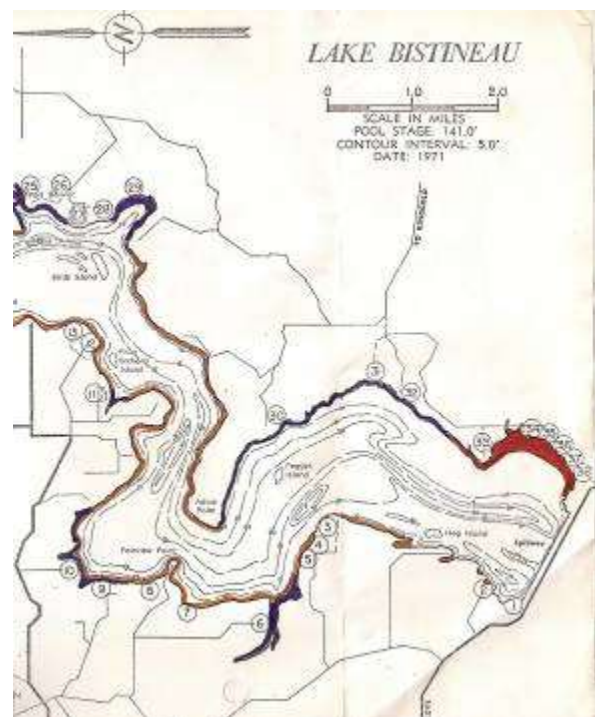
APPENDIX V

Lake Bistineau Typemaps

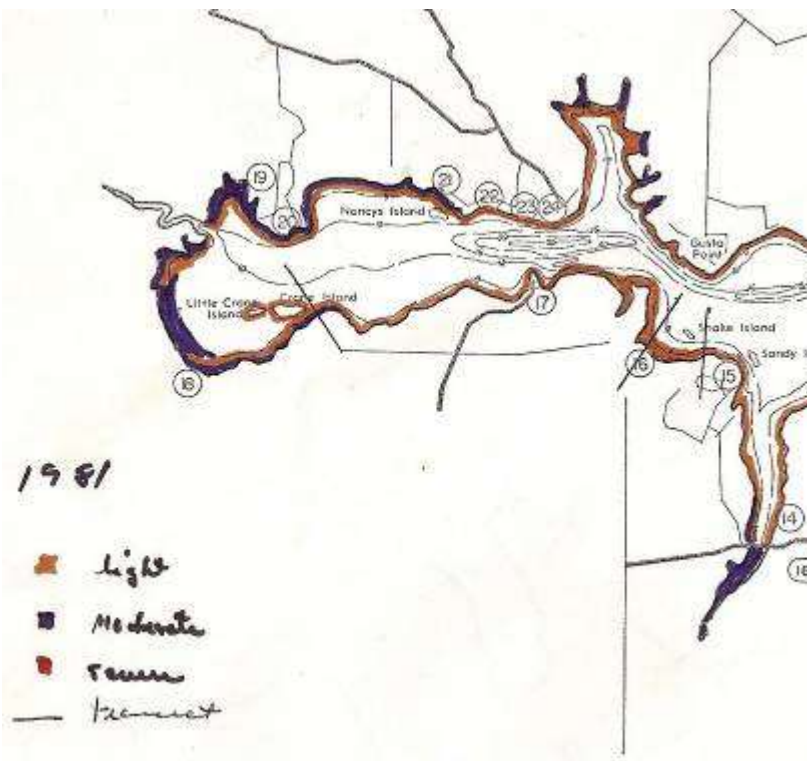
1980 Type Map – North Section



1980 Type Map – South Section



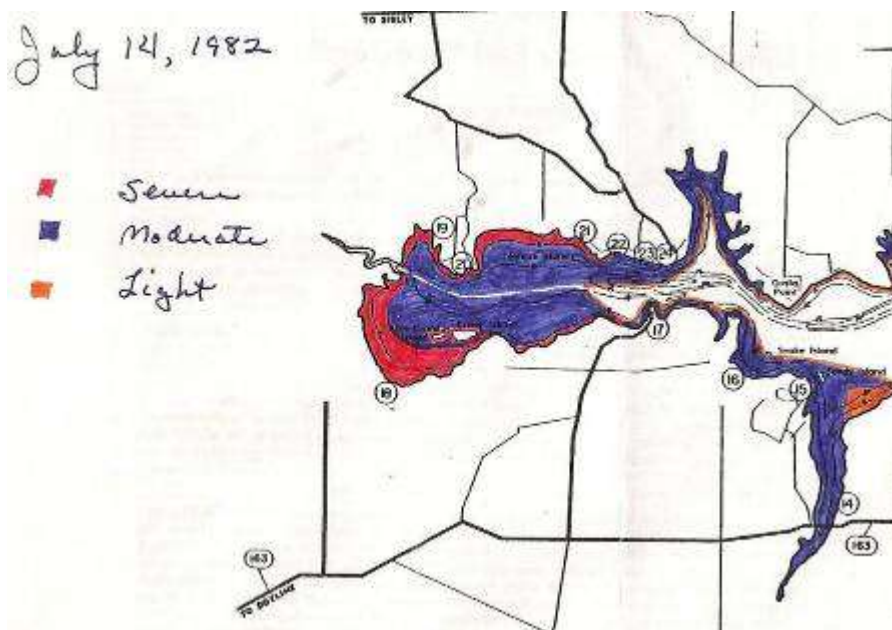
1981 Type Map – North Section



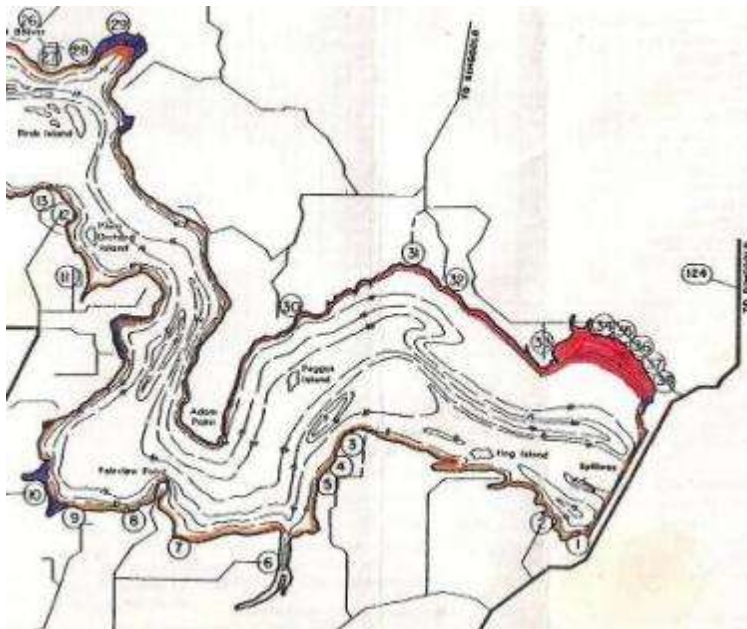
1981 Type Map – South Section



1982 Type Map – North Section



1982 Type Map – South Section



1983 Type Map – Narrative

LAKE BISTINEAU July 1983

At the time of assessment Lake Bistineau was at pool stage. The condition of the water ranged from clear in most areas to murky in areas where sewage is getting into the lake.

The submersed plants noted are filamentous algae, Potamogeton, Utricularia, Ceratophyllum, Cabomba, Myriophyllum.

The marginal plants noted are Cephalanthus, Ludwigia, Polygonum, Scirpus, Cyperus, Pontederia and Sagittaria.

The floating plants noted were Eichornia and Spirodela.

Since the survey in 1982 the water hyacinth have doubled in area and density. Many areas of the lower half of the lake are having problems that they didn't have in 1982. Much of Lake Bistineau is unusable because of the water hyacinths.

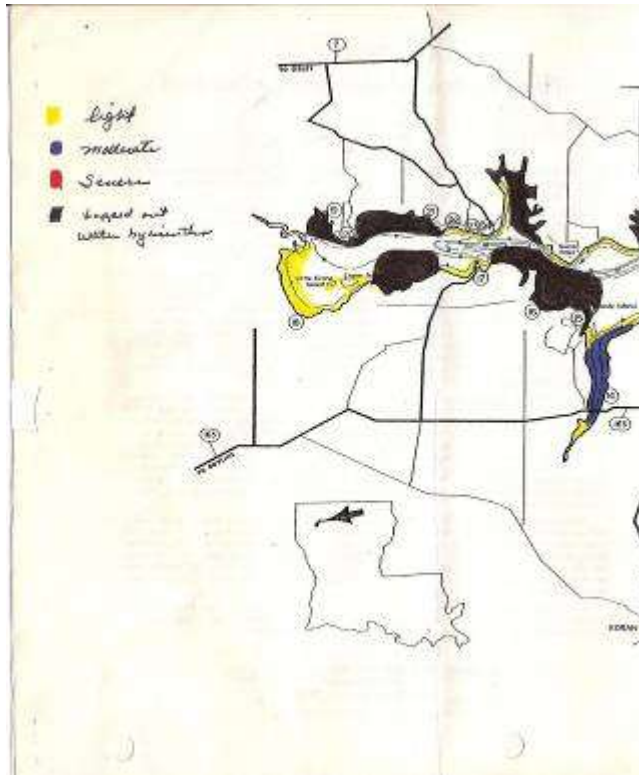
The submersed plants were found in light infestations in the upper end and mid-portion with some areas of moderate to severe infestation in the lower east bank area.

In summary Lake Bistineau has a very severe water hyacinth problem concentrated in the upper two thirds of the lake. Duckweed is not present like it was in 1982.

Submersed plants have not increased as anticipated. There has been a decrease in the amount of submersed plants in some areas of the lake. The cause for the decrease in submersed plants would be hard to determine and would only be theory.

At this time, a water fluctuation program might cause more problems than it will do good. A drawdown would probably cause an increase in submersed plants in the lower end and if the right weather conditions didn't prevail the water hyacinth problem would probably be aggravated lake wide. It would be a gamble to actually say at this time that water fluctuation would help the problems on Bistineau.

1983 Type Map – North Section



1983 Type Map – South Section



1984 Type Map - Narrative

Lake Bistineau 1984:

At time of assessment Lake Bistineau was at pool stage. The water had a generally good color with a fair amount of plankton present. The water in the extreme upper end was turbid compared to the water a half mile below.

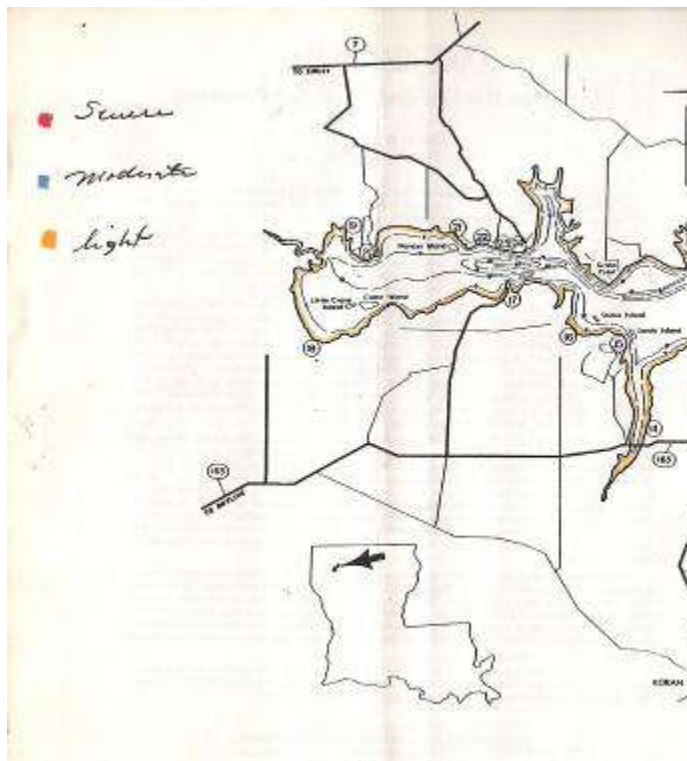
The infestation of submersed aquatic plants as noted on the type map was for the most part light with the exception of one area that was moderate. The light infestations noted on the type map consisted of Utricularia and Ceratophyllum often mixed with Chara. The moderate infestations noted on the type map consisted of primarily Utricularia, filamentous algae, chara, and in some areas Milfoil.

The marginal plants noted were Ludwigia, young Eichhornia, Alternanthera, Cephalanthus, and miscellaneous grasses.

In summary Lake Bistineau is in very good condition. The submersed plants are light in infestation and causing no problem. The marginal and floating plants are in tolerable amounts and under control.

Melvin Bagwell

1984 Type Map – North Section



1984 Type Map – South Section

1988 Type Map - Narrative

LAKE BISTINEAU

1988

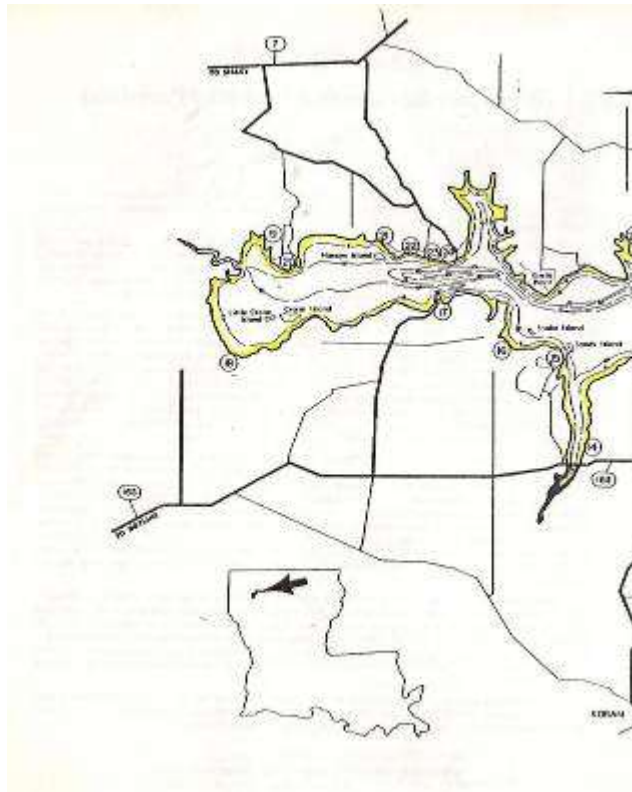
At the time of assessment Lake Bistineau was ten inches below ten inches below pool stage. The water color was good. Plankton bloom was noted in almost all areas. The area around small Island had less plankton bloom than other areas for some unexplainable reason.

The submersed aquatic plants noted were Cabomba, Utricularia, Ceratophyllum, Myriophyllum, ehara, Eleocharis, and Southern naiad.

The emersed plants noted were primrose white waterlily and American Lotus.

In summary Lake Bistineau is in good condition. There has been an increase in Milfoil in the area on the east side alone the dam. In other areas there has been no significant increase this last growing season. Few water hyacinths were noted, most had been sprayed. Some areas have a fair amount of filamentous algae in mats. One algae area is the east side above the dam and also the area around Camp Joy.

1988 Type Map – North Section



1988 Type Map – South Section



LAKE BISTINEAU 1989

Lake Bistineau, Webster, Bienville, and Claiborne parishes was assessed for aquatic plants in August 1989. Lake Bistineau was at pool stage. The water color was a turbid brown color. The Scachi disc reading was thirty five inches (35"). Lake Bistineau was subjected to a high water fluctuation in early summer. The lake had a level of seven feet (7') above pool stage.

The dominant vegetation in the upper end of Lake Bistineau is Bladderwort (utricularia), southern naid (najas), whorled Milfoil (Myriophyllum heterophyllum). Infestations are light in most areas.

The dormant vegetation in the mid and lower portion of Lake Bistineau is Bladderwort (utricularia) Southern naid (najas) coontail (ceratophyllum) and the east side Whorled milfoil (Myriophyllum) heterophyllum and in some isolated spots parrot feather (Myriophyllum). Infestations are light in most area and except a few pockets on the east side which are moderately infested.

Lake Bistineau is experiencing an increase in water hyacinths at this time. There is an approximate 20-25 percent infestation at this time. American Lotus was not noted in this assessment.

1989 Type Map – North Section



1989 Type Map – South Section



1990 Type Map - Narrative

Lake Bistrican

1990

Lake Bistrican, archaic, Barbone, and Scimmillo, was assessed for aquatic plants in July, 1990.

at the time of assessment Lake Bistrican was at pool stage. The water color ranged from clear in the lower end to turbid in the upper end.

The dominant vegetation in the upper half of Lake Bistrican was *Utricularia inflata*, *Myriophyllum heterophyllum*, *Najas guadalupensis* and *Centrophyllum ducouranum*.

The dominant vegetation in the lower half of Lake Bistrican was *Utricularia inflata*, *Myriophyllum heterophyllum* and *Najas guadalupensis*. Other plants noted are considerable amounts of filamentous algae.

Most infestations in Lake Bistrican were light, but there was some evidence on the east side that near mortality existed.

water hyacinths were very lightly infested. No animal plants were in any number to cause any problems.

Lake Bistrican was subjected to flood water in June 1990 water levels of 7 feet above pool was noted.

1990 Type Map – North Section



1990 Type Map – South Section



1991 Type Map - Narrative

LAKE BISTINEAU 1991

At the time of assessment Lake Bistineau was at pool stage. The water color was turbid with a fair plankton bloom. The Secchi disc reading was 32 inches.

The submersed aquatic plants noted were Cabomba, Utricularia spp., Myriophyllum heterophyllum, Ceratophyllum, Chara and Najas guadalupensis.

The emersed aquatic plants noted were nymphae, Ludwigia spp. Polygonum spp. and Typhus.

In summary upper Lake Bistineau has only one area of moderately infested submersed plants, another area is on the lower end. All other areas are very lightly infested or have no plants at all. Lake Bistineau was subjected to flooding in early spring. Water levels reached eight (8) feet above pool stage.

1991 Type Map – North Section



1991 Type Map – South Section

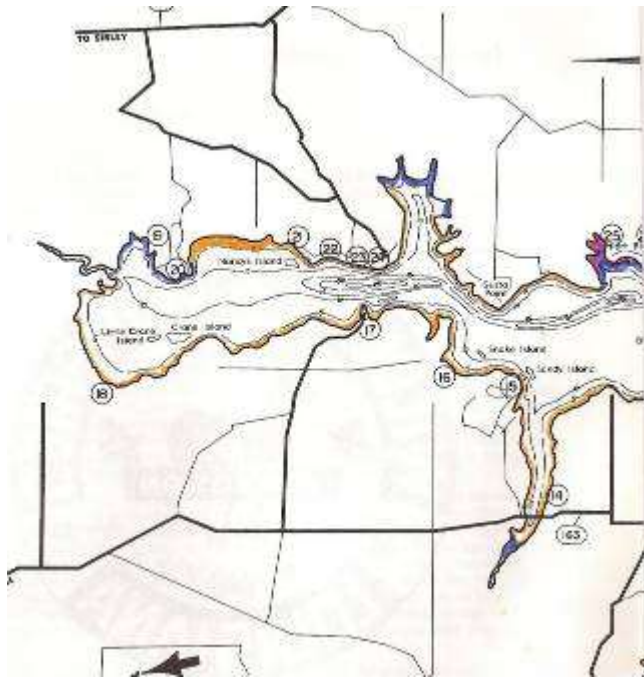
Lake Bistoneau
1992

at the time of assessment Lake Bistoneau was 18" below pool stage. a gate on the dam and low rainfall caused the low water level this summer. The water color ranged from clear in the lower end to turbid in the upper end. The water showed a fair amount of sloughing.

The submersed aquatic plants noted were Cabomba, Ceratophyllum, Milfoil (whorled), Elodea, Chara, Najas guadalupensis, Hydrochara and filamentous algae.

There has been a decrease in aquatic plants in areas in the lower end of the lake. one plant that has increased significantly is Milfoil. There has been an increase in water hyacinth and alligatorweed also.

1992 Type Map – North Section



1992 Type Map – South Section

1993 Type Map - Narrative

Lake Bostman
1993

Lake Bostman was surveyed for aquatic plants in May, 1993.

At the time of survey Lake Bostman was at pool stage. The water color was clear. The sacchi die reaching was 4' feet.

The primary aquatic plant noted was *Utricularia*. The secondary plants were *Celastrolia*, *phorol* *wilfist*, *Coonkail*, and *Sandwich* *Nid.* Aquatic plants in most areas ranged from moderate to light. Several areas in particular had severe infestations. Big and little *toulins* and also the *mud* *clerk* areas had severe infestations. Most severe infestations were out to 7' feet and in the *mud* *clerk* area out to 9' feet.

1993 Type Map

Lake Bostman
1993



1994 Type Map - Narrative

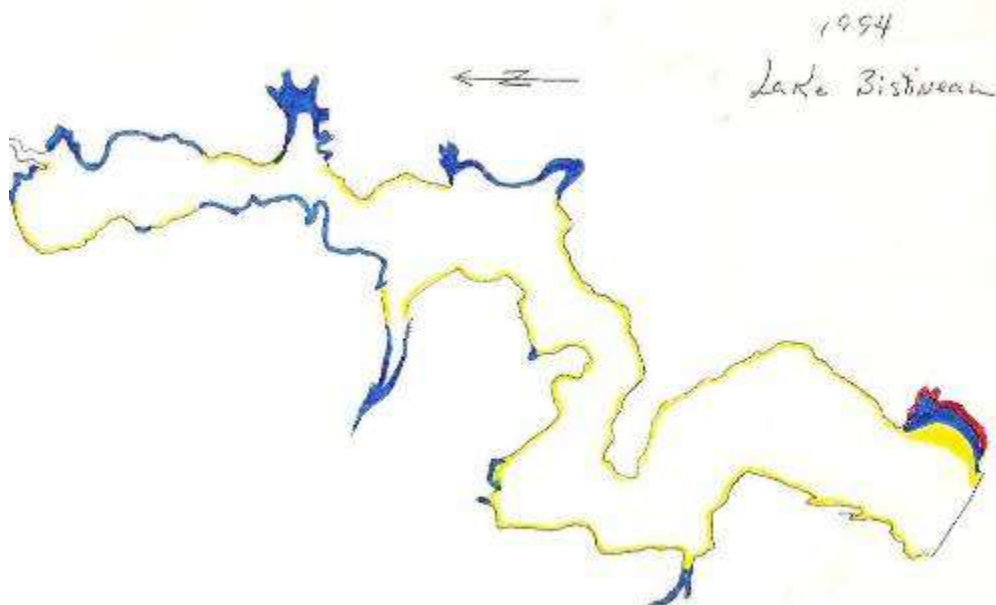
Lake Bistoneau
1994

at the time of assessment Lake Bistoneau was at pool stage. The water color was clear. The water had some turbidity in the upper end. The Secchi disk reading was 48 inches lower end and 42 inches in the upper end.

The submersed aquatic plants noted were, *Sagittaria*, *Myriophyllum*, *Ceratophyllum*, *Potamogeton*, *Sagittaria*, *Elodea*, and *Potamogeton* algae. One area at upper end had an *Egeria* infestation.

The submersed aquatic plants in Lake Bistoneau ranged from moderate in the upper end to light in the lower end. There was some increase in water hyacinth in all areas. Defoliation of submersed plants are increasing in density and area on the outside of the lake above the drop. Also big and little toulain and the brushy area have moderate infestations. The plants were breaking at 6 feet.

1994 Type Map



1995 Type Map - Narrative

Lake Bistoneau

1995

at the time of assessment Lake Bistoneau was below normal pool approximately 15 inches. The water was fairly clear and slightly turbid. The Secchi disc reading was 30 inches.

The submersed aquatic plants noted were Cabomba, Utricularia, Myriophyllum, Najas, and Ceratophyllum. Most infestations of submersed plants were light to moderate. There is a severe infestation of submersed plants north of the dam and also in Big Toulon arm of the lake.

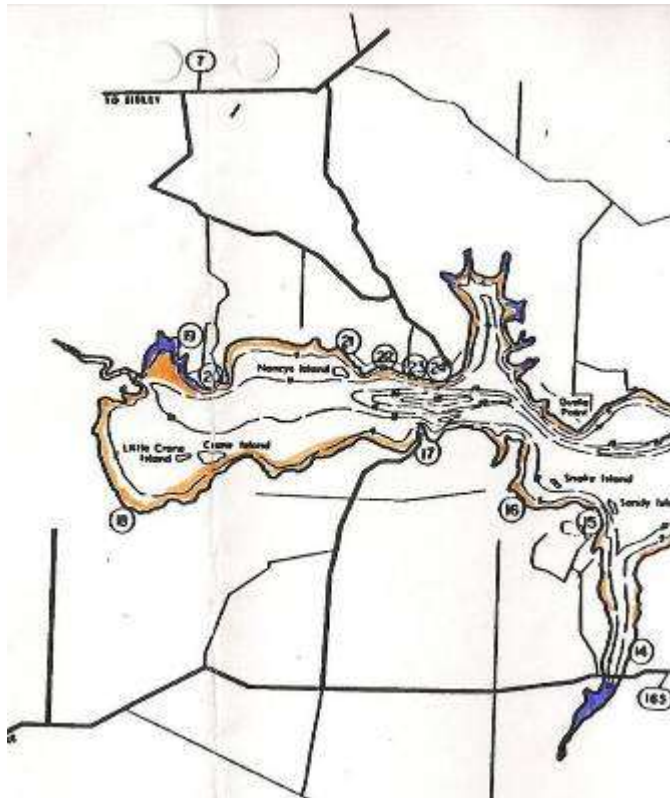
The emergent plants noted were smartweed, Spikerush, alligatorweed, Typha, Sagittaria and pondweed.

1995 Type Map - Amendment to Narrative

Lake Bistoneau Amendment to Survey 1995

While making a routine inspection of a sprayed area north of the dam a rooted mat of *Najas verticillata* was found one half mile north of the dam. This area is usually 12 feet deep.

1995 Type Map – North Section



1995 Type Map – South Section



1997 Type Map - Narrative

1997 Lake Bistineau

At the time of assessment Lake Bistineau was at pool stage. The water color was clear to stained.

The submersed aquatic plants noted were hydrilla, cabomba, ceratophyllum, milfoil, utricularia, chara, filamentous algae, potamogeton, and Southern naiad.

The floating and emerged plants noted were water hyacinths, primrose, smart weed, alligator weed, arrowhead, bullrush, and miscellaneous sedges and grasses.

The distribution of plants in Lake Bistineau was light in most areas and moderate in a few areas in the upper end. Lake Bistineau has a ten percent infestation.

A map of the San Juan Islands in the Pacific Northwest, showing sampling stations numbered 14 through 25. The map includes labels for Nonsa Island, Little Crane Island, Crane Island, Snake Island, and Sandy Island. Sampling stations are marked with circled numbers along the coastlines and in the surrounding waters. Station 14 is located near Sandy Island, station 15 is on Sandy Island, station 16 is near Snake Island, station 17 is in the central channel, station 18 is near Little Crane Island, station 19 is on the western coast, station 20 is near Crane Island, station 21 is on Nonsa Island, station 22 is in the central channel, station 23 is near Nonsa Island, station 24 is on the eastern coast, station 25 is on the far right, and station 163 is at the bottom right.

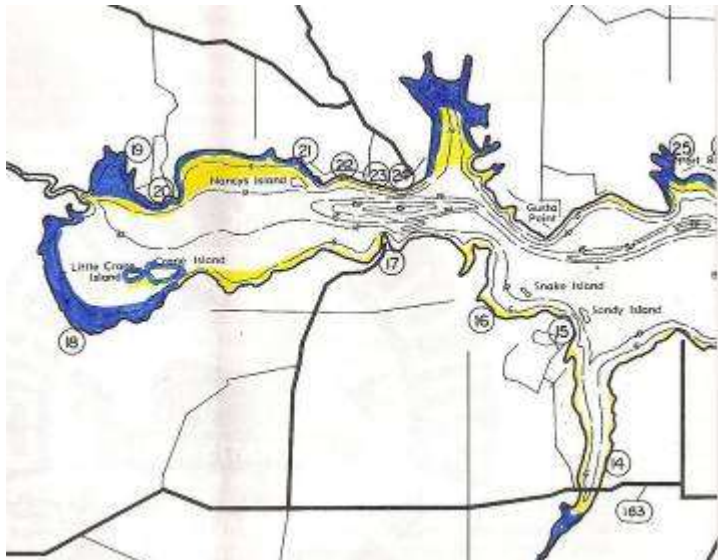
The map illustrates the Klamath River estuary with numerous sampling stations marked by numbered circles. Key geographical features include Pogon Island, Addon Point, Fairview Point, and Spillway. The river flows from the top left towards the bottom right, where it meets the Klamath Lake. Arrows indicate the direction of flow. The map also shows the locations of Klamath Falls and Klamath Lake.

1998 Type Map - Narrative

LAKE BISTINEAU 1998 Melvin Bagwell

At the time of assessment, Lake Bistineau was at pool stage. The water color was clear to stained. The aquatic plants surveyed were hydrilla, fanwort, coontail, bladderwort, milfoil, Chara, and filamentous algae. The floating and emersed plants surveyed were water hyacinth, water primrose, smartweed, alligatorweed, duckweed, white water lily, lotus, and bulrush. The distribution of aquatic plants in Lake Bistineau was light in most areas and moderate in the upper end. Total infested area was an estimated 15%.

1998 Type Map – North Section



1998 Type Map – South Section

1999 Type Map – Narrative

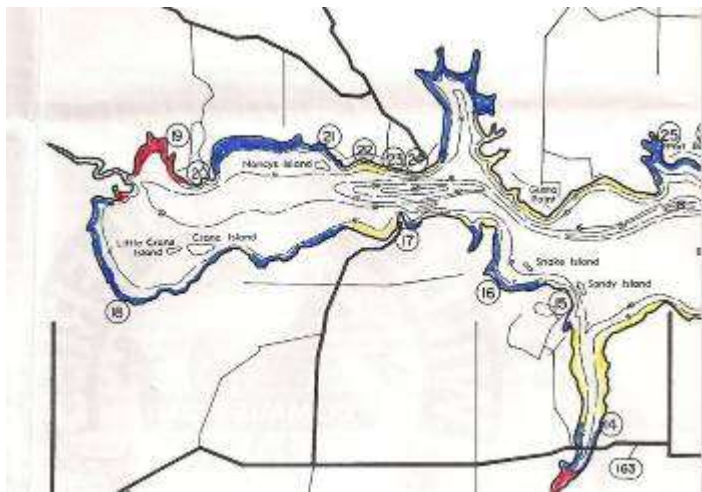
Lake Bistineau

1999

Melvin Bagwell

At time of the assessment, Lake Bistineau was ten inches below pool; water color was clear. The submersed aquatic plants noted were fanwort (*Cabomba caroliniana*), coontail (*Ceratophyllum demersum*), bladderwort (*Utricularia* sp.), southern naiad (*Najas guadalupensis*), milfoil (*Myriophyllum* sp.), filamentous algae, hydrilla (*Hydrilla verticillata*), and *Chara* sp. The emerged aquatic plants noted were lotus (*Nelumbo lutea*), white water lily (*Nymphaea odorata*), cattail (*Typha latifolia*), water hyacinth (*Eichhornia crassipes*), smartweed (*Polygonum* sp.), alligatorweed (*Alternanthera philoxeroides*), and primrose (*Ludwigia* sp.). The infestations of submersed aquatic plants ranged from light in most areas to moderate and severe in the extreme ends of the arms in the upper end. The infestations of emerged aquatic plants were light and marginal.

1999 Type Map – North Section



1999 Type Map – South Section

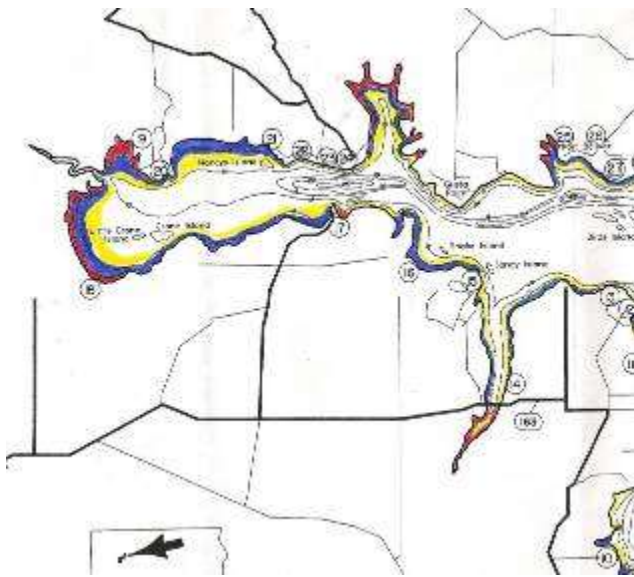


2000 Type Map - Narrative

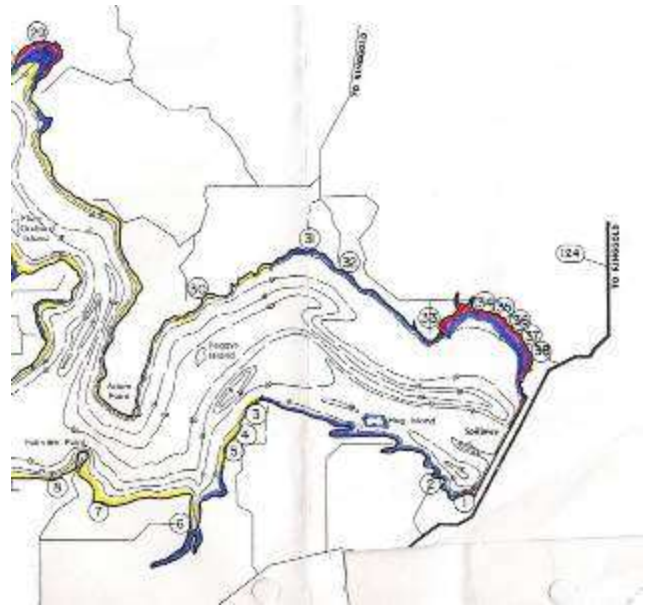
Lake Bistineau -2000
Melvin Bagwell

At the time of the assessment Lake Bistineau was 8 inches below pool stage. The water color was fairly clear. The infestations of aquatic plants ranged from severe to light. Moderate and light infestations were out to seven feet. The submersed aquatic plants noted were Cabomba, coontail, Utricularia, milfoil, hydrilla, southern naiad, Chara, and filamentous algae. The percentage of total infestation in Lake Bistineau was an estimated 15 percent.

2000 Type Map – North Section



2000 Type Map – South Section



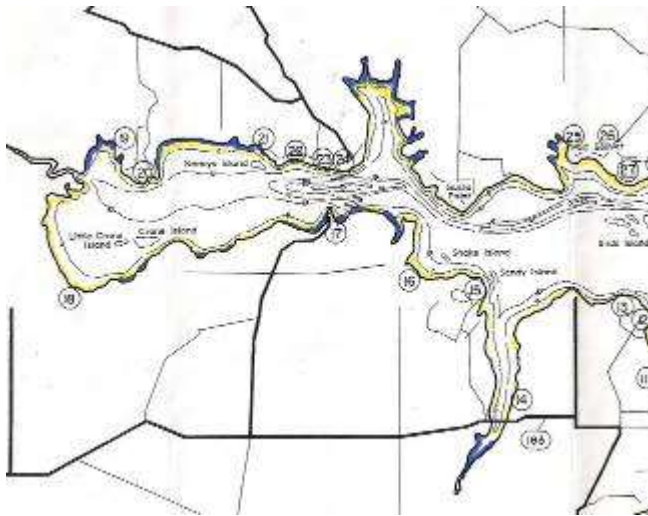
2001 Type Map – Narrative

LAKE BISTINEAU - June 2001

Melvin Bagwell

Lake Bistineau was surveyed for the presence of aquatic plants on June 25, 2001. At this time the lake was at pool stage. The water color was fairly clear. The submersed plants noted were: coontail (*Ceratophyllum demersum*), southern naiad (*Najas guadelupensis*), bladderwort (*Utricularia sp.*), filamentous algae, hydrilla (*Hydrilla verticillata*), Chara and pondweed (*Potamogeton spp.*). The emersed aquatic plants noted were: water hyacinth (*Eichhornia crassipes*), white water lily (*Nymphaea odorata*), American lotus (*Nelumbo lutea*), and watershield (*Brasenia schreberi*). The estimated percent coverage of submersed plants was less than 10%.

2001 Type Map – North Section



2001 Type Map – South Section



2005 Type Map - Narrative

Lake Bistineau - 2005

Vegetation Type Map

The vegetation type mapping survey was performed between 6-13-05 and 7-12-05 prior to dewatering the lake for a second of three recommended consecutive drawdowns. Employees from the Louisiana Department of Wildlife and Fisheries identified the aquatic vegetation species present in the lake and assessed the extent of coverage around the lake.

Species Present

The aquatic plant community on Lake Bistineau can best be described as a conglomerate of emergent, submergent and floating plants that includes the following species: alligator weed (*Alternanthera philoxeroides*), primrose species (*Ludwigia spp.*), water hyacinths (*Eichhornia crassipes*), American lotus (*Nelumbo lutea*), purple bladderwort (*Utricularia purpurea*), variable leaf milfoil (*Myriophyllum heterophyllum*), parrotfeather (*Myriophyllum aquaticum*), Duckweed (*Lemna minor*), water meal (*Wolffia Columbiana*), water fern (*Salvinia rotundifolia*), Southern watergrass (*Hydrochloa carolinensis*), cutgrass (*Leersia hexandra*), water paspalum (*Paspalum fluitans*), Illinois pondweed (*Potamogeton illinoensis*), pennywort (*Hydrocotyle spp.*), coontail (*Ceratophyllum demersum*), Fragrant waterlily (*Nymphaea odorata*), roadgrass (*Eleocharis baldwinii*), arrowhead (*Sagittaria spp.*), Baby tears (*Bacopa moneria*), filamentous algae, Hydrilla (*Hydrilla verticillata*), and charagrass (*Chara spp.*).

Severity

Percent coverage of aquatic vegetation is estimated to be 25-30%. The emergent vegetation presents the largest problem with alligator weed and primrose being the most abundant plants. In the most severe areas, these two species are present with the milfoil, chara, bladderwort and roadgrass mixed in. Most of the above species are not dense enough to cause a problem with public access; they are merely scattered in with the alligator weed and primrose. This alligator weed/ primrose/milfoil combination is more severe on the north end of the lake and the extreme southeastern corner (see map) . The vegetation is not as dense in the mid-lake area where more open water and fewer trees are present. Wind action and increased depth in this area probably adds to the reduction in the vegetation density.

This alligatorweed/ primrose/ milfoil combination of vegetation is present around most of the lake, but does not seem to expand much beyond the five foot contour line. There are some scattered patches of alligator weed present in the cypress tree “forests” away from the shore line. Also, the submerged vegetation is more prevalent in the southeastern portion of the lake, below the Bienville Public ramp.

Other problematic plants are American lotus, fragrant water lily, hydrilla, and water hyacinths. These are generally localized populations. Hydrilla is present around the Bossier Parish public boat launch at moderate levels. Lotus is severe in some extremely shallow areas of the lake and the water lilies pose a problem in the area between Camp Bistineau and Camp Joy along the western shore. Water hyacinths

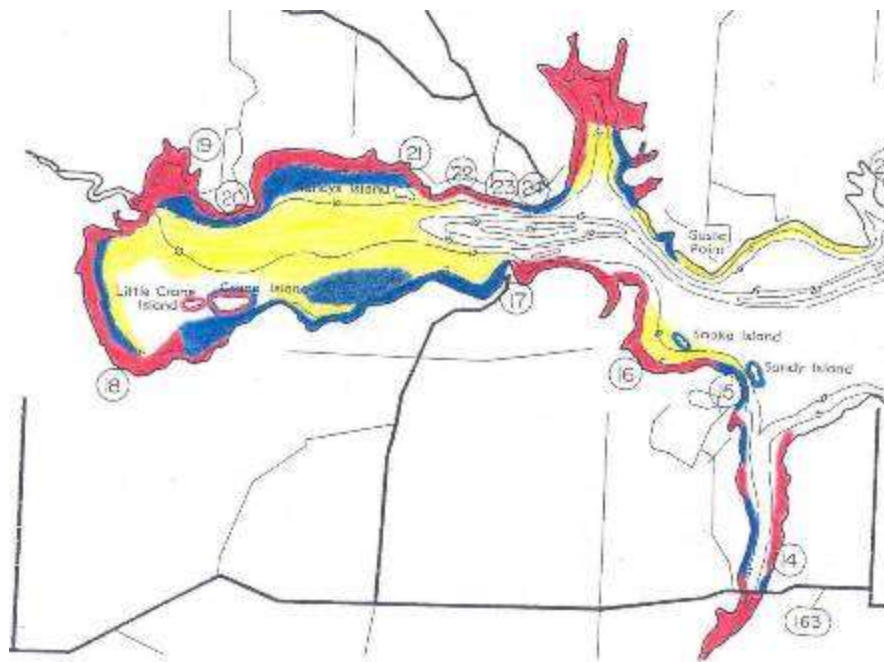
are severe in some small areas of the lake, such as the back end of Big Toodlum. This population is blocked into the area by a stand of dense trees and other vegetation and is not likely to drift away.

Management/History

Lake Bistineau was slated to begin a series of three consecutive 7 foot summer drawdowns in July, 2004; for the purpose of improving bottom habitat. Vegetation control was a secondary goal. Lake Bistineau has a history of vegetation problems. Hyacinths have been found in the lake for more than 50 years and have covered large portions of the lake in the past. The lake is experiencing a buildup of organic “muck” on the lake bottom that is causing a reduction in sportfish populations. This organic layer is preventing successful spawning of sunfish and other nest building fish. Years of decaying vegetation and leaf litter from the cypress canopy have led to this “muck”. The drawdowns were scheduled for mid-July through January so as to utilize summer heat to dry the lake bed.

The 2004 drawdown was moderately successful. The lake filled to pool earlier than expected by fall rains, but many positive signs were observed. Hyacinths numbers were greatly reduced and some drying action occurred on the lake bottom. The 2005 drawdown has been a success. Drought conditions allowed for excellent drying of the lake bottom and the lake has remained down from July until the completion of this document (12-14-05). Aquatic vegetation has been exposed dry, hot conditions and several light frosts and cold temperatures; therefore, densities should be lower in the near future.

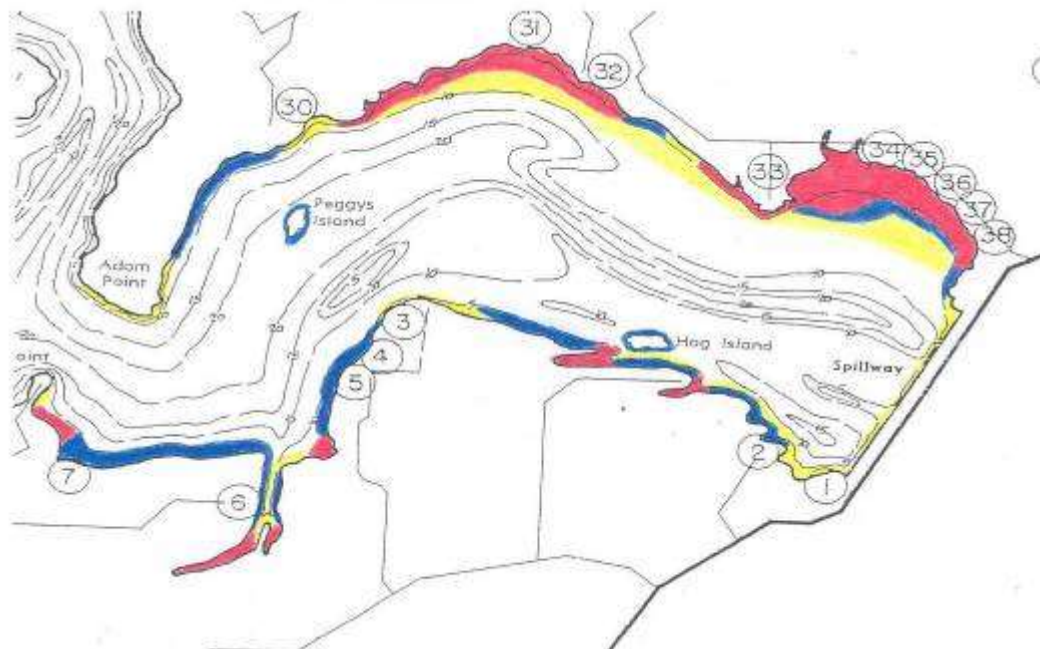
2005 Type Map – North Section



2005 Type Map – Middle Section



2005 Type Map – South Section



2006 Type Map - Narrative

Lake Bistineau Vegetation Type Map 2006

The vegetation type mapping survey was performed between 5-16-06 and 6-1-06. Employees from the Louisiana Department of Wildlife and Fisheries identified the aquatic vegetation species present in the lake and assessed the extent of coverage around the lake. During the time of the survey, the lake was clear and at pool stage.

Species Present

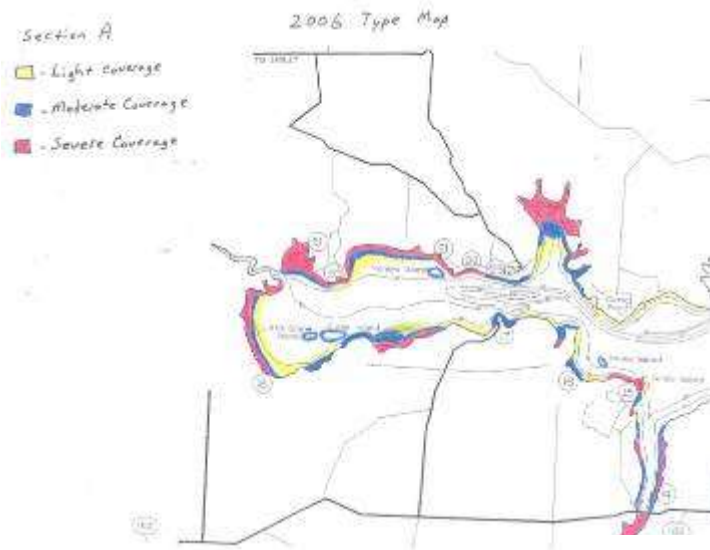
The dominant species on Lake Bistineau is Alligatorweed (*Alternanthera philoxeroides*). The lake is coming off of two consecutive summer drawdowns for bottom habitat improvement. The vegetation community of the lake has been greatly altered following the drawdowns. The alligatorweed survived the dewatering better than any other species and has grown rapidly with the lack of competition. There is a fringe of Alligatorweed around almost the entire lake except in areas very close to deep water or where wave action prevents weed growth. The following species are also found on the lake, but at fairly low densities: Giant Salvinia (*Salvinia molesta*), Duckweed (*Lemna minor*), primrose species (*Ludwigia spp.*), water hyacinths (*Eichornia crassipes*), American Lotus (*Nelumbo lutea*), Watermeal (*Wolffia Columbiana*), cutgrass (*Leersia hexandra*), pennywort (*Hydrocotyle spp.*), coontail (*Ceratophyllum demersum*), fragrant water lily (*Nymphaea odorata*), roadgrass (*Eleocharis baldwinii*), baby tears (*Bacopa moneria*), filamentous algae, Chara grass (*Chara spp.*), and willow trees (*Salix nigra*).

Severity

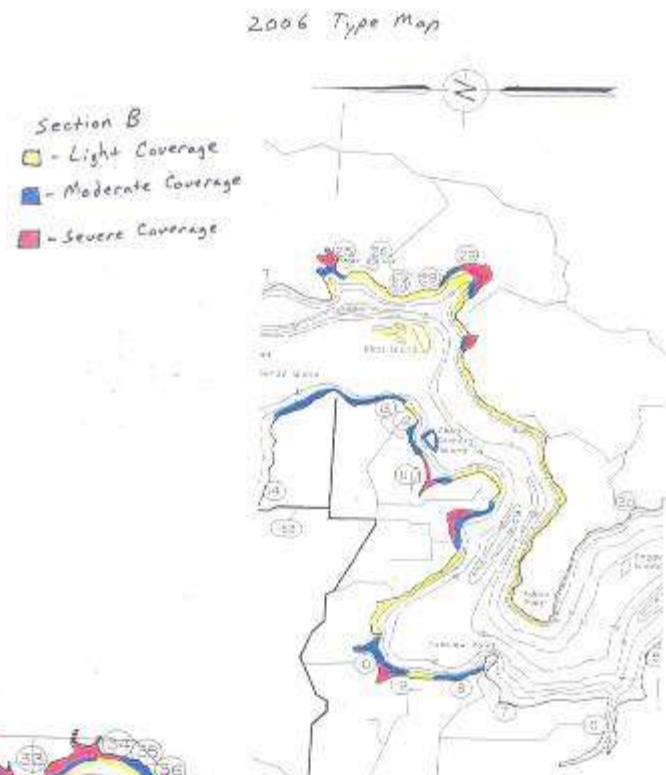
Percent coverage of aquatic vegetation is estimated to be 12.7% with approximately 2,200 acres of vegetation. Alligatorweed poses the largest problem as it is dense in many areas of the lake near camps and public access areas along the shoreline. The alligator weed is found out to the four foot contour of the lake. It is more dense in the upper parts of the lake and on the southeast corner of the lake. Wind action and increased depth in the mid-lake area help reduce vegetation densities.

Willow trees grew in certain areas of the lake during the drawdowns and are dense in these small areas. Willows are found in the Tadpole Slough area, above the bridge on Clark's Bayou and on the southeast corner of the lake below the Bienville public launch. Giant Salvinia was first identified on the lake in February 2006 and has only been found in the area from Peggy's Island to the dam. At the time of this survey, Giant Salvinia was at low densities and no large mats have been found. It is scattered throughout this part of the lake, but appears to be multiplying. The plants found have a "juvenile" appearance and have not taken on the characteristic large size and cupped leaves of Giant Salvinia. The other species found in the lake are at relatively low densities and do not currently pose any problems.

2006 Type Map – North Section

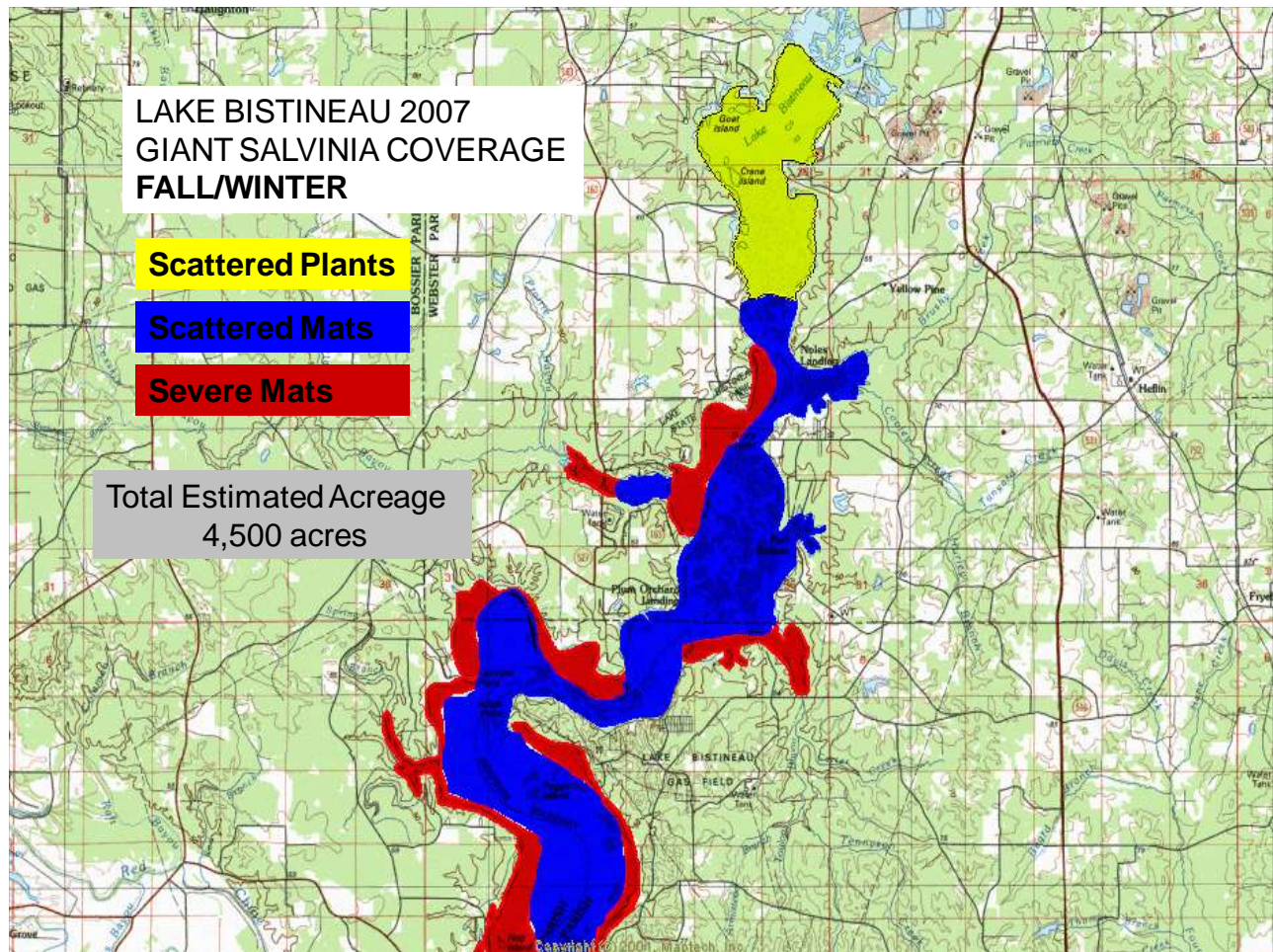


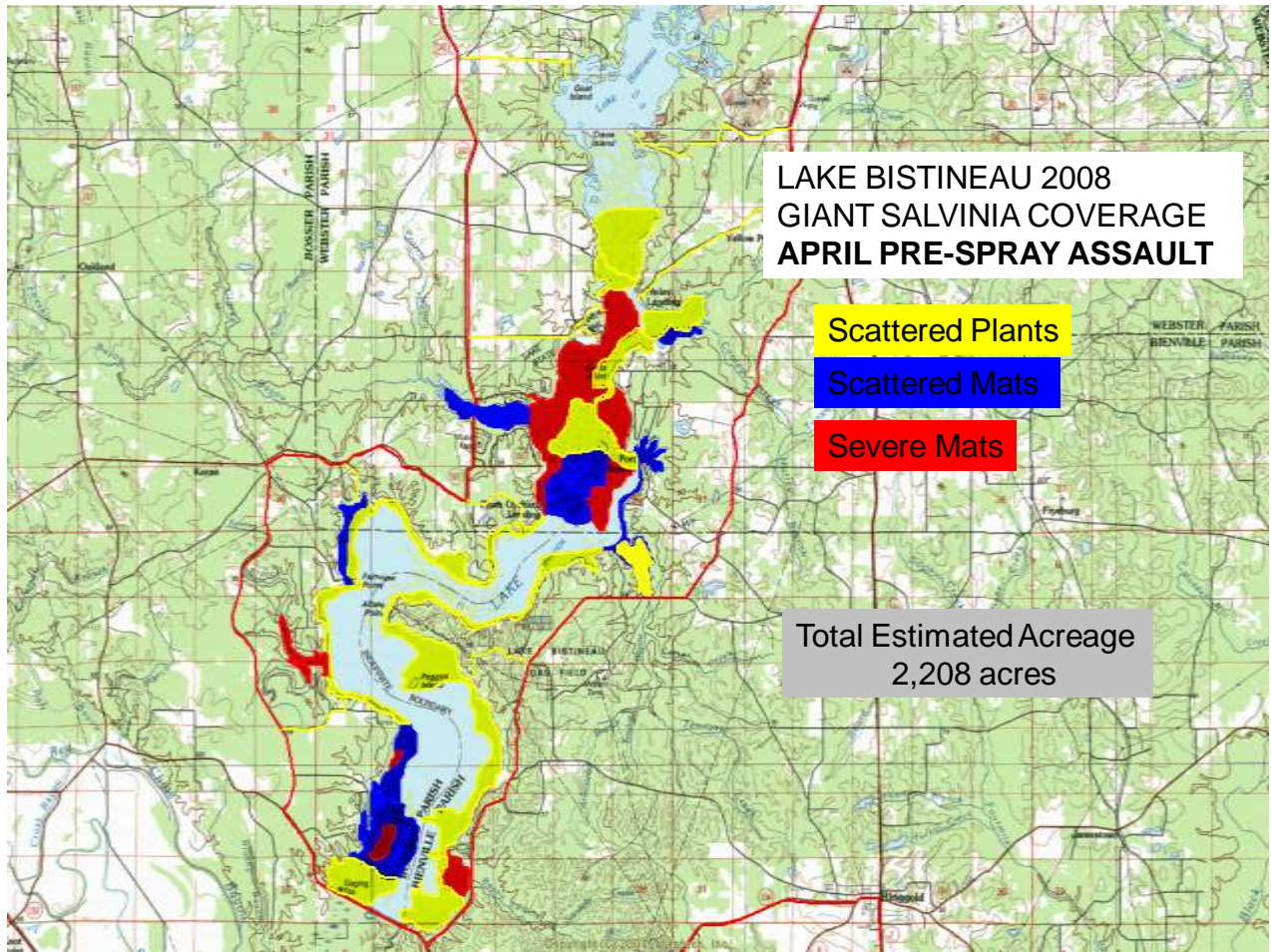
2006 Type Map – Middle Section

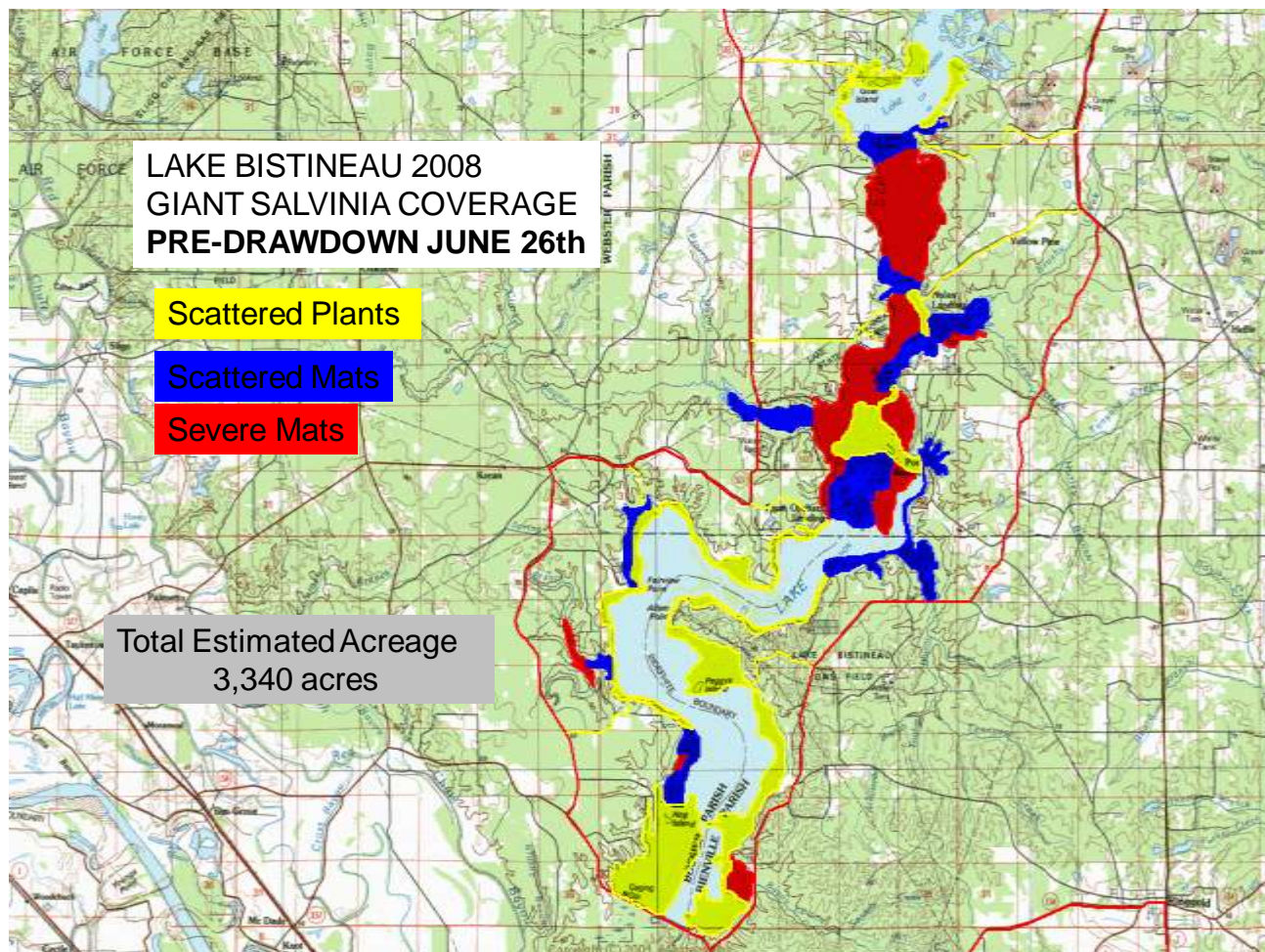


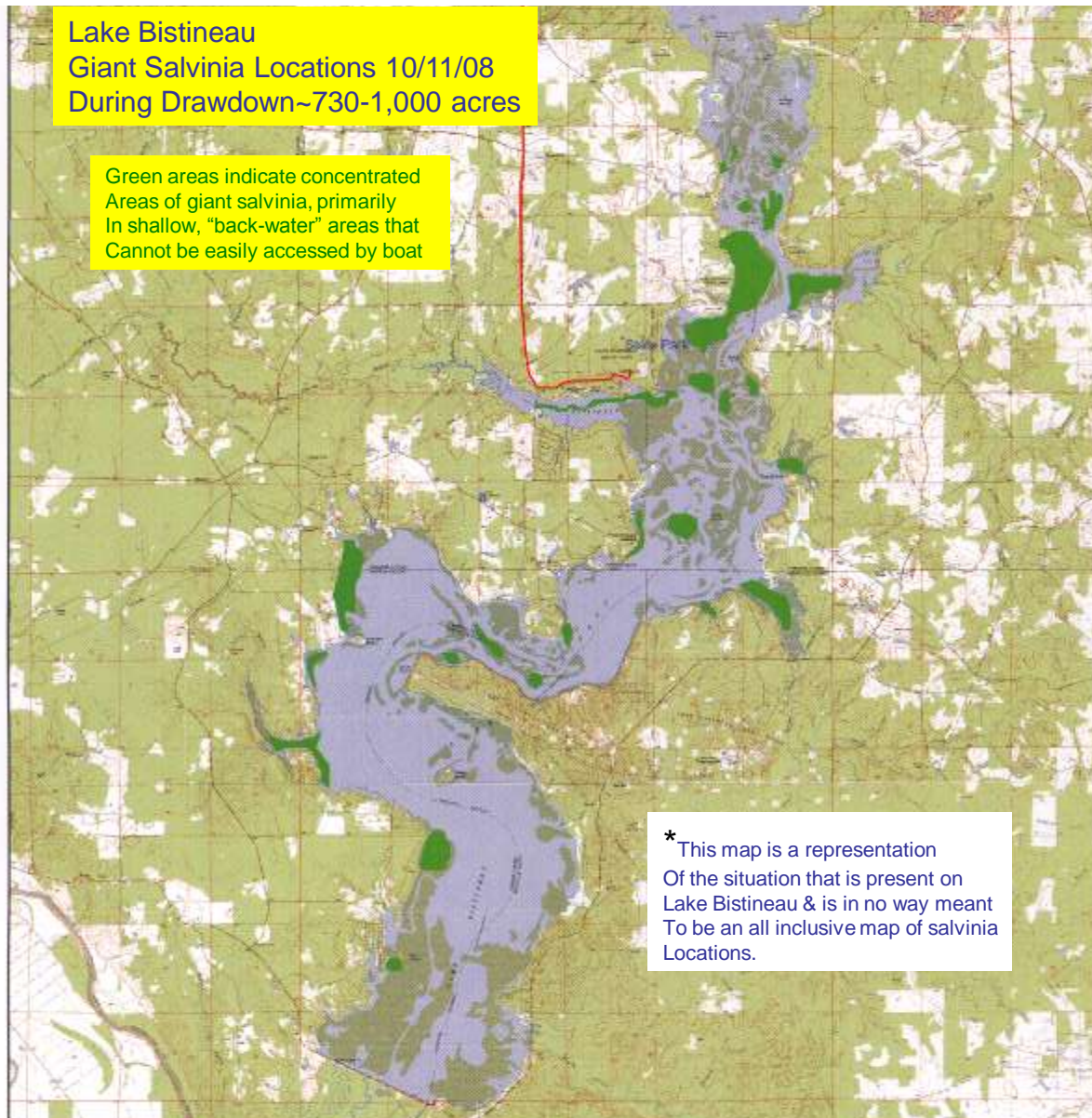
2006 Type Map – South Section

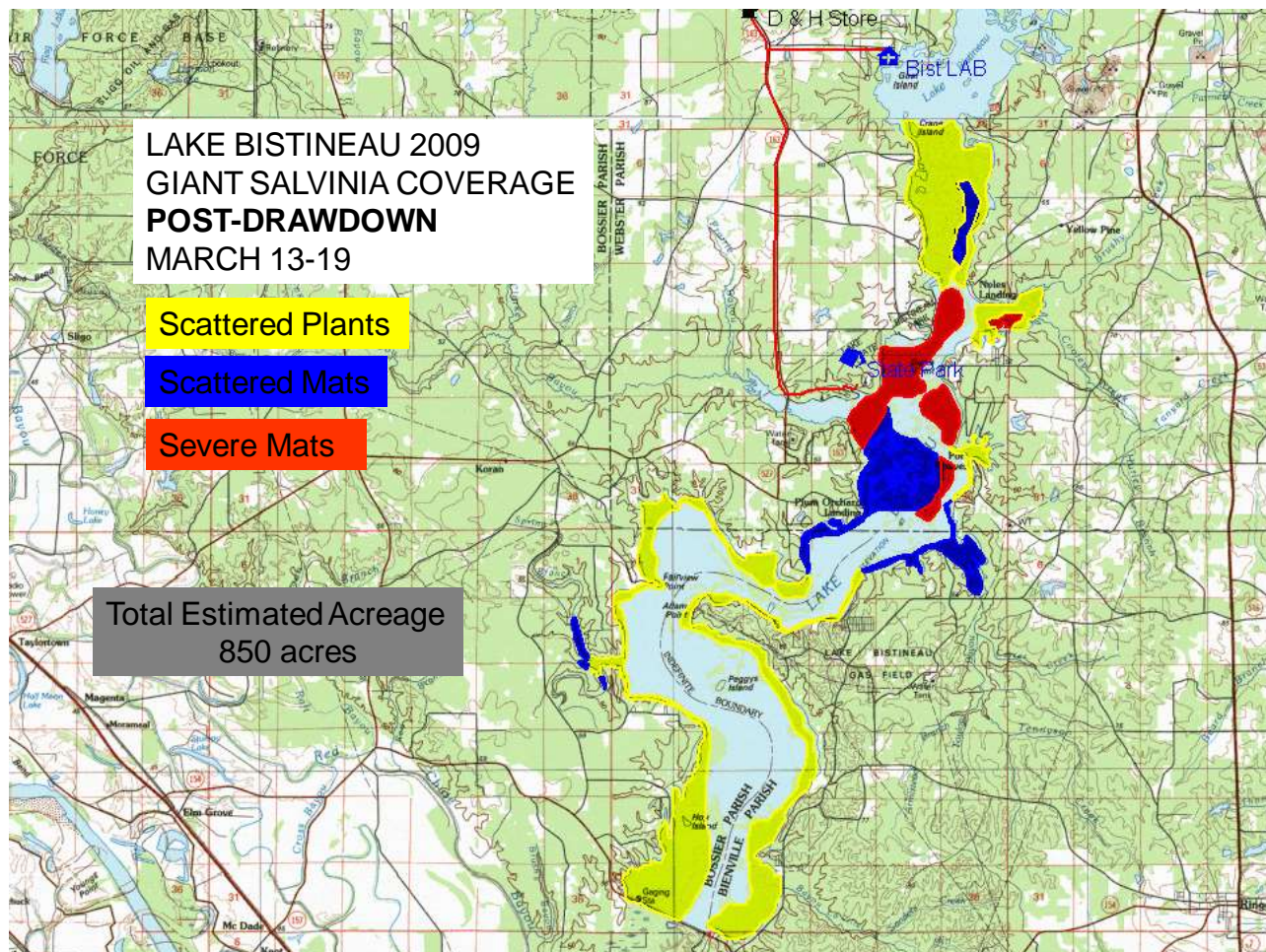


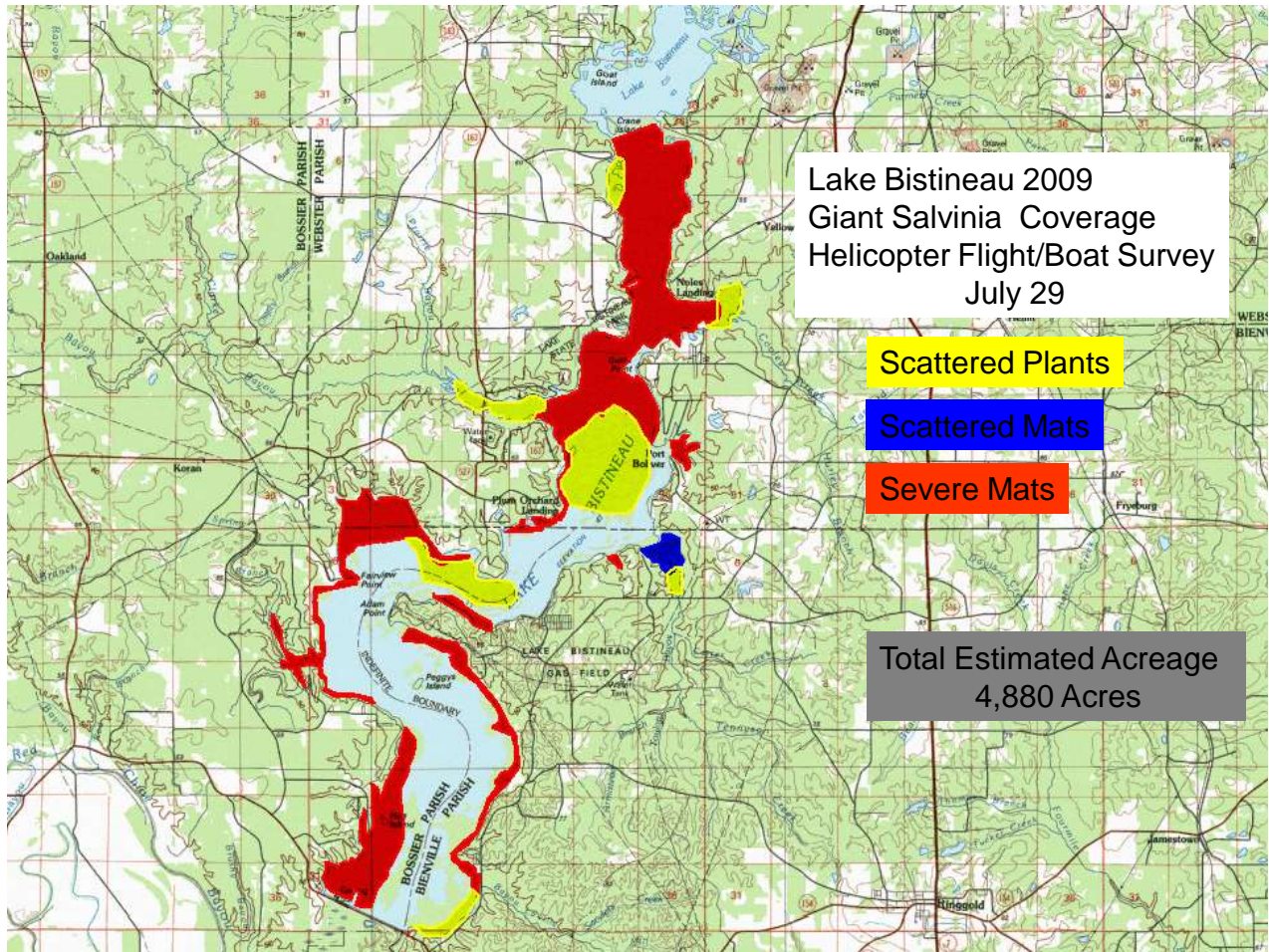


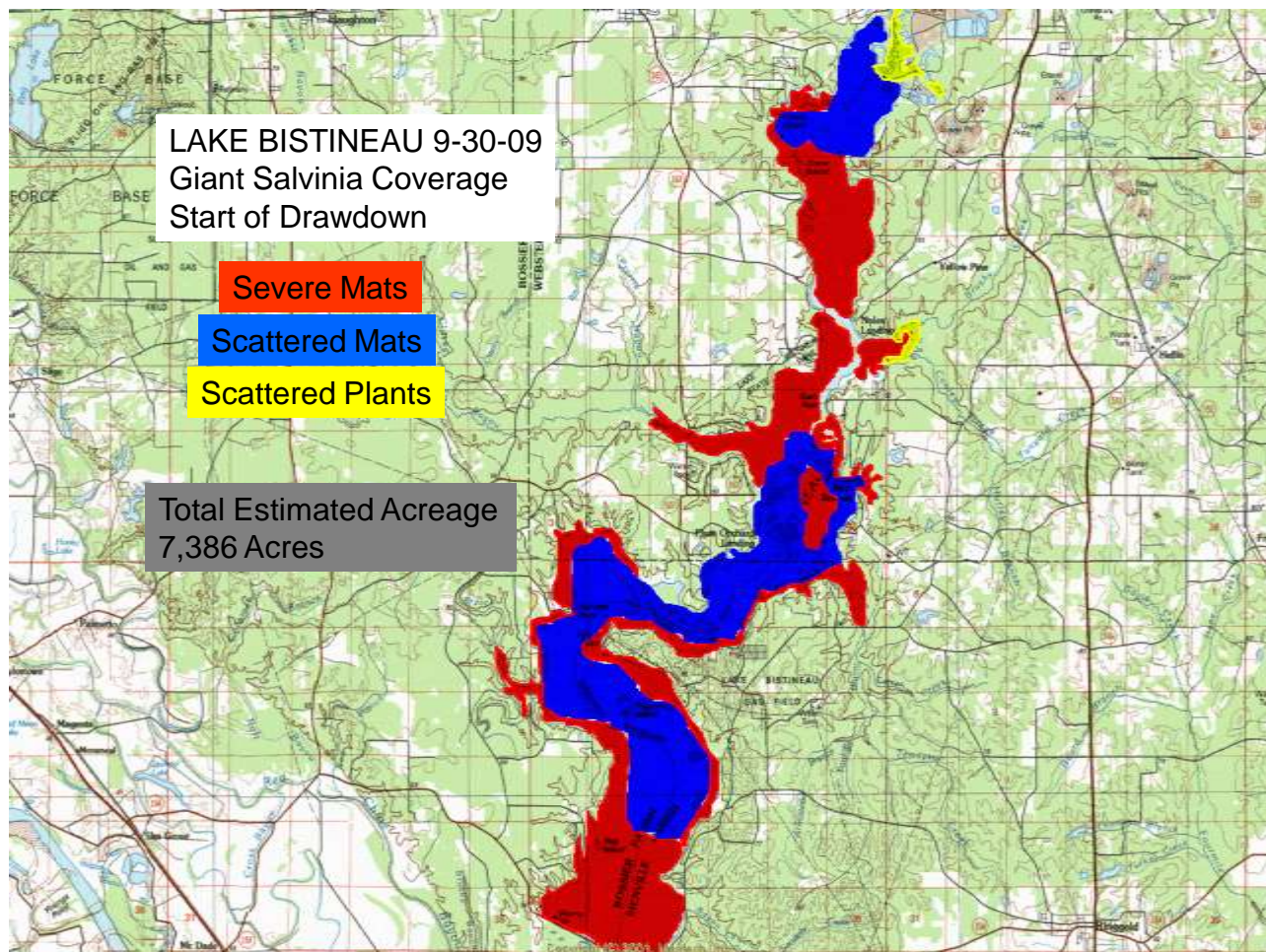


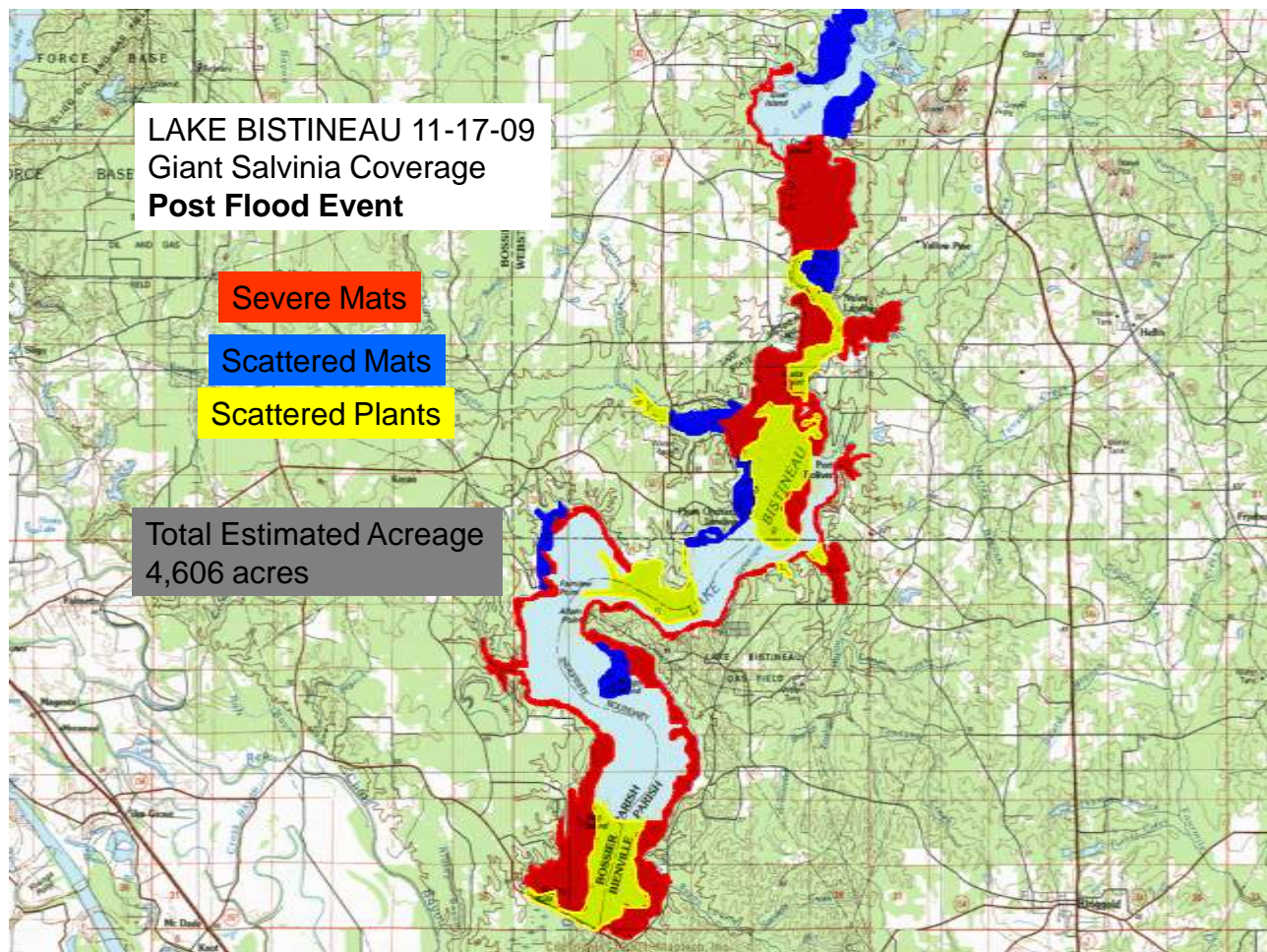






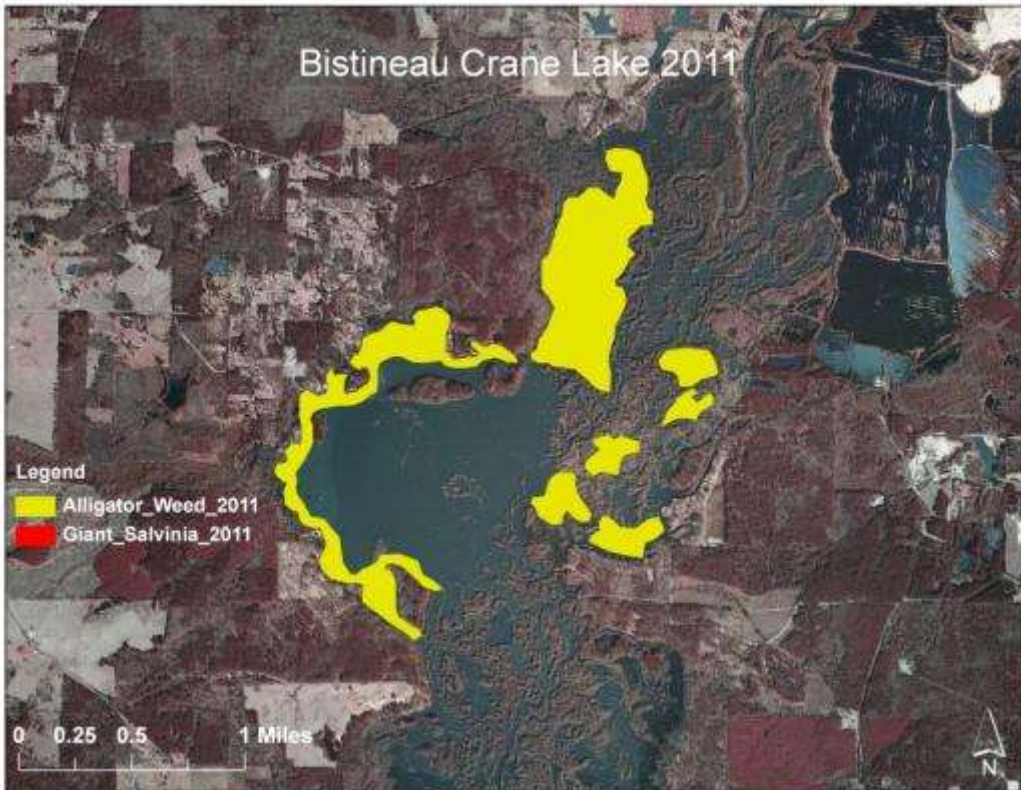




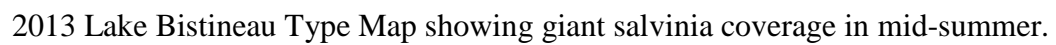


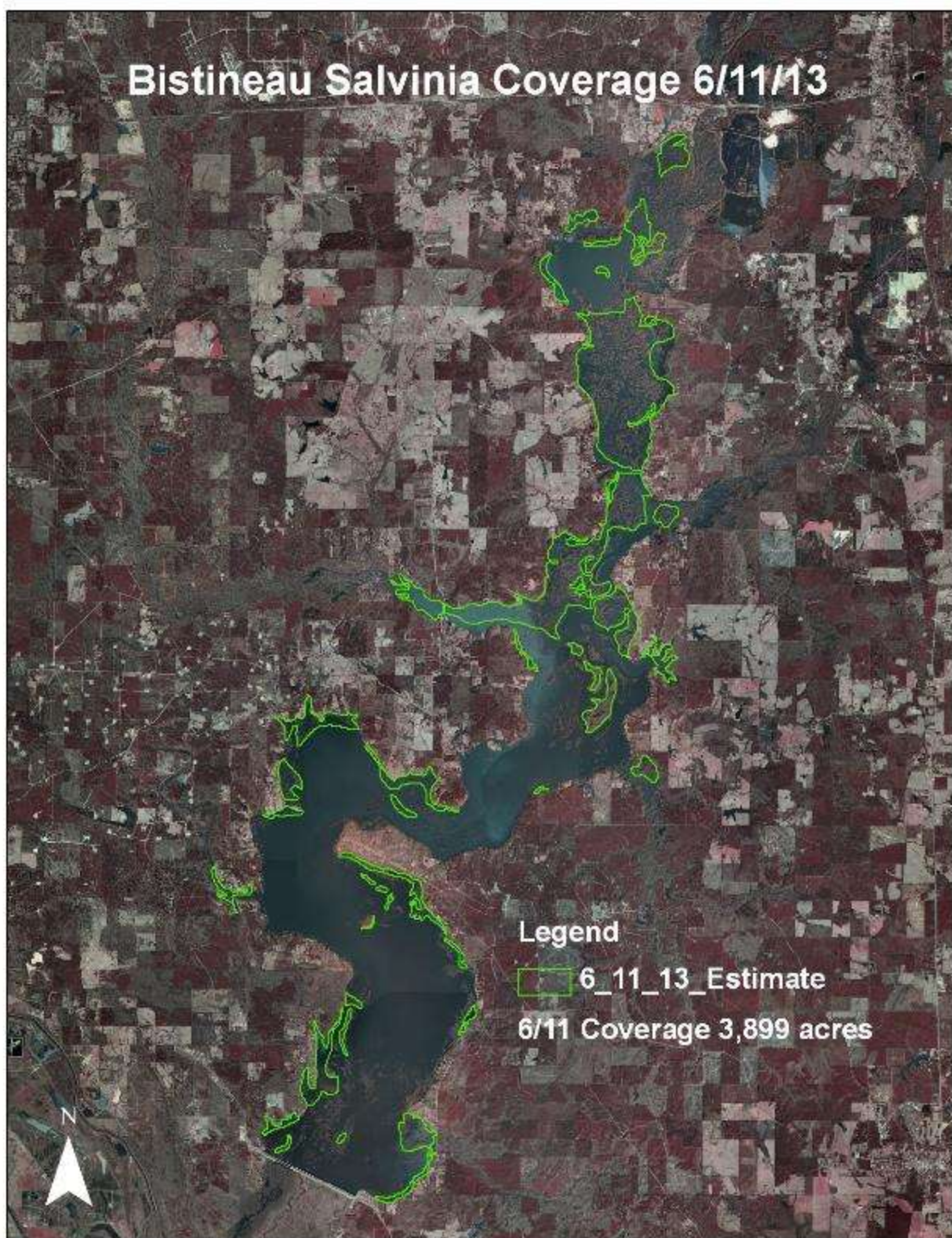
2011 Lake Bistineau Type Map showing alligator weed and giant salvinia coverage in mid-

summer.

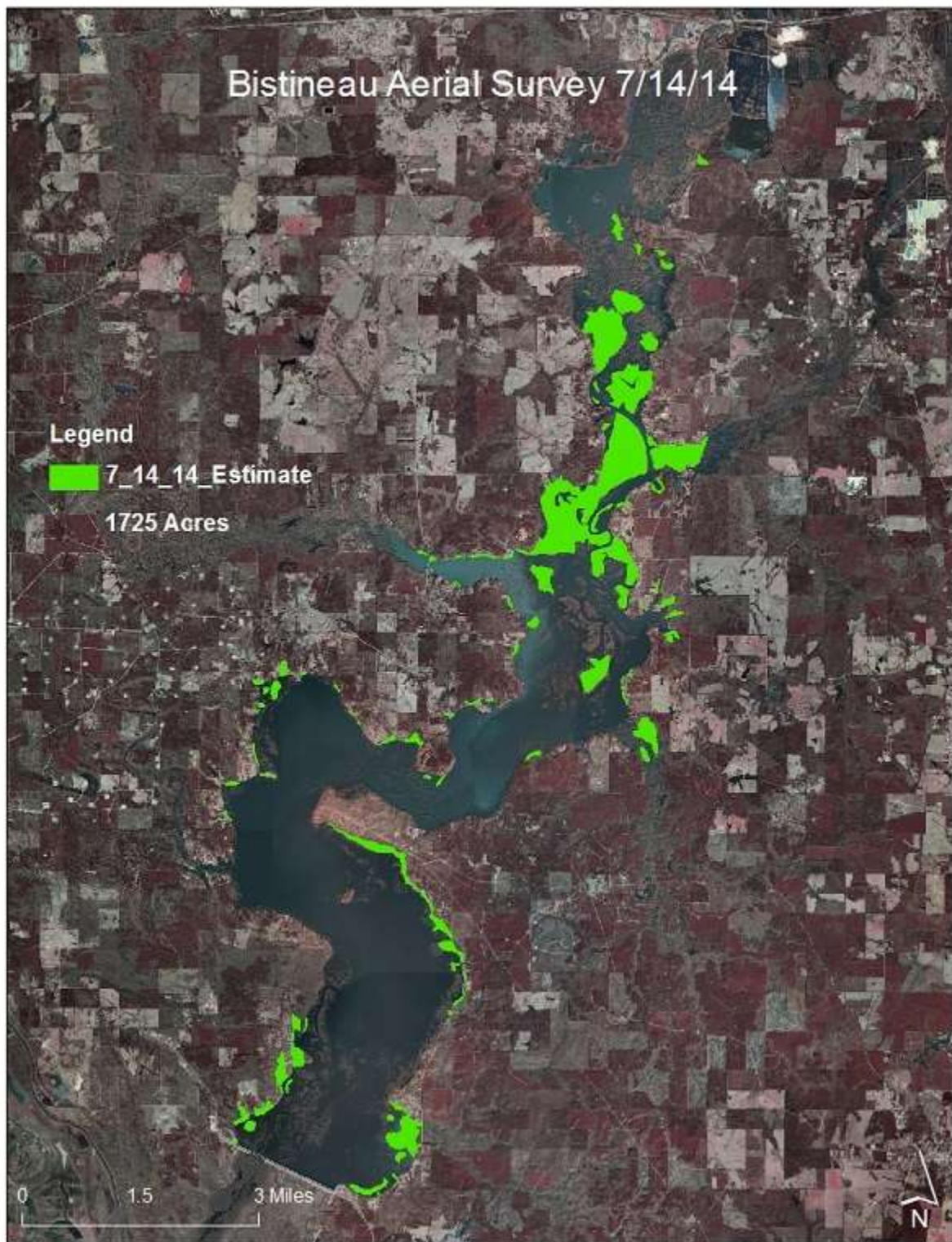


2013 Lake Bistineau Type Map showing giant salvinia coverage in mid-summer.

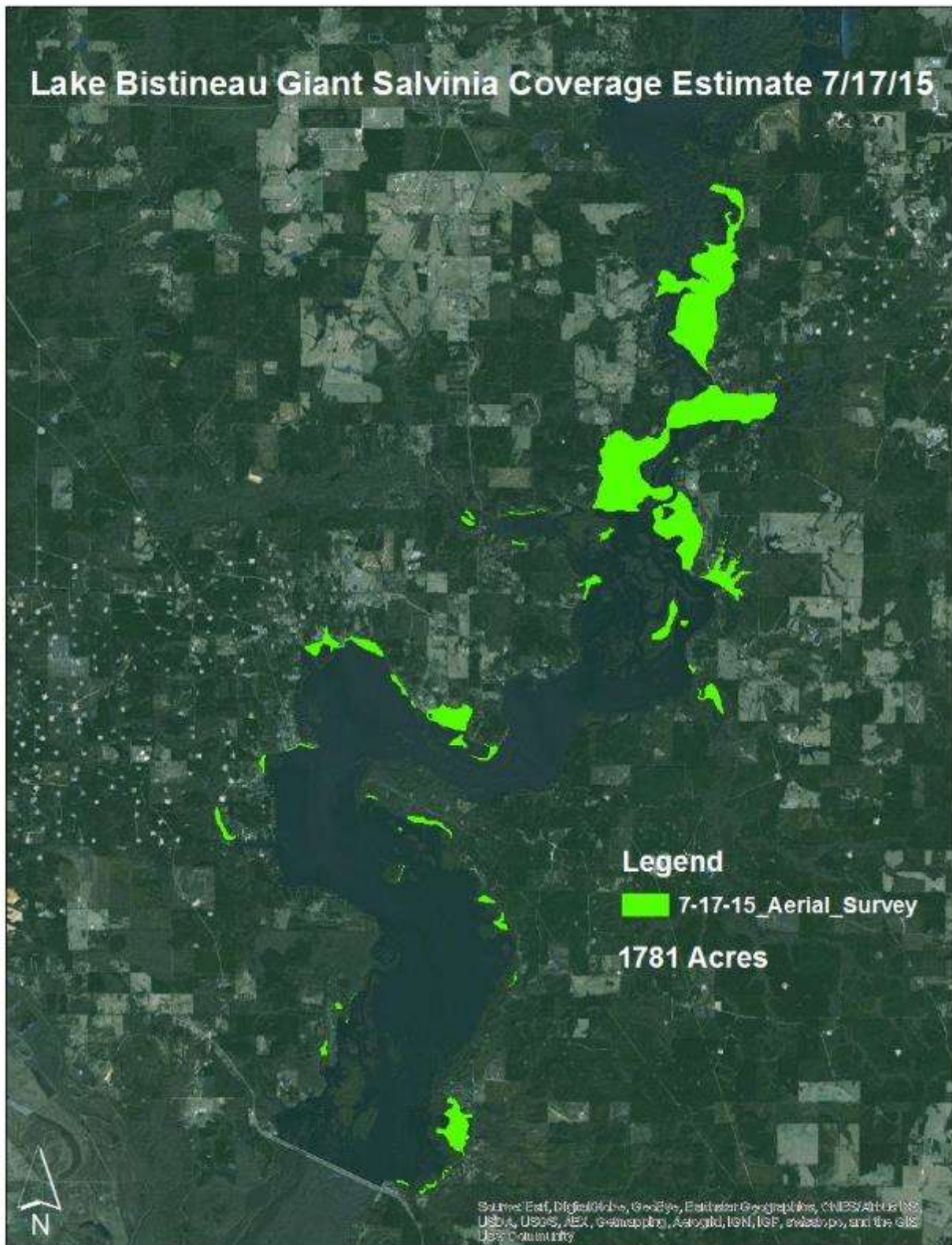




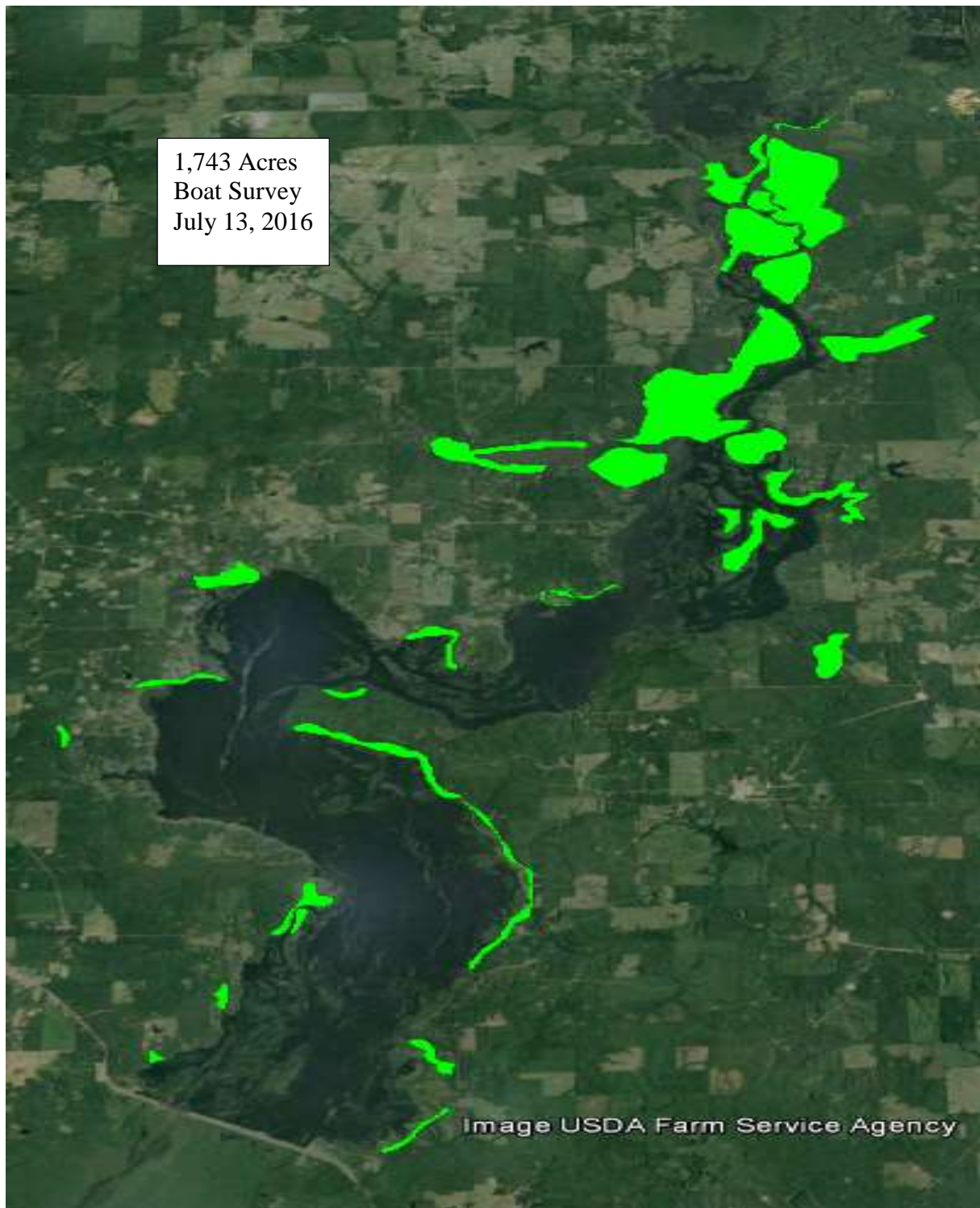
2014 Lake Bistineau Type Map showing giant salvinia coverage in mid summer.



2015 Lake Bistineau Type Map showing giant salvinia coverage in mid summer.



2016 Lake Bistineau Type Map showing giant salvinia coverage in July.



2016 Lake Bistineau Type Map showing giant salvinia coverage in August following delay of

drawdown.

Lake Bistineau Giant Salvinia Coverage Estimate 8/12/16

